MARYLAND
Medical Journal

Medicine and Surgery

The Medical Journal Company

BALTIMORE *Publishers* WASHINGTON

Volume Fifty-Nine
Number Eight

AUGUST, 1916

Annual Subscription
Two Dollars

Straining at Stool

is minimized, and often overcome, by the judicious use of **INTEROL,** which softens the fecal mass, and lubricates it all along the colon and rectum, past the sphincter, without irritating or abrading the mucosa.

Thus, there is less danger of ulceration; bowel evacuation is facilitated, and the patient made happy on this latter account alone,—entirely aside from **INTEROL'S** beneficial relation to the accompanying autotoxemia.

Also, **INTEROL** is of great comfort to the patient suffering from hemorrhoids or fissures, because it makes the fecal mass soft and plastic, so that it is passed with less difficulty and discomfort, and congestion is relieved. For these reasons, **INTEROL*** has been suggested as a *prophylactic* measure of these conditions, both for adults and children.

***INTEROL** is more than "ordinary mineral oil": (1) it possesses *effective lubricating body* so that it clings to the fecal mass—**INTEROL** has efficient "spread and mix" properties (2) no "lighter" hydrocarbons to disturb the kidneys (3) no sulphur compounds to disturb digestion (4) no odor or flavor, so that the patient *can* take it and derive its benefit.

Pint bottles at druggists. ***INTEROL** booklet on request.

VAN HORN AND SAWTELL, 15 and 17 East 40th Street, New York City

IF YOU ARE USING

some nondescript inferior substitute for

Gray's Glycerine Tonic Comp.

FORMULA DR. JOHN P. GRAY

you are not getting the results you would were you using the original. On the contrary, your patients fail to receive the benefits they hope for—or you to accomplish the effects you have a right to expect.

"The original Gray's" (in 16 oz. Bottles) represents the highest quality, constant uniformity, and definite responsibility. That is why its use means protecting your patients' welfare and safeguarding your own interests.

Insisting on "the original Gray's" often means the difference between SUCCESS and FAILURE.

THE PURDUE FREDERICK CO., 135 CHRISTOPHER STREET, NEW YORK.

Chevy Chase Sanatorium

WASHINGTON, D. C.

A HIGH-GRADE institution for the care and treatment of those suffering from Nervous and Mental Diseases, Alcohol and Drug Addicts and general enfeeblement.

Located in the choicest suburb of the National Capital, surroundings ideal, buildings new, heated by steam, lighted by electricity, licensed by the District of Columbia, inspected and controlled by the Health Department of the City of Washington.

FOR TERMS, ADDRESS

DR. BENJAMIN RUSH LOGIE

Chevy Chase Sanatorium WASHINGTON, D. C.

MARYLAND MEDICAL JOURNAL

FOR AUGUST, 1916

VOL. LIX *Entered at the Baltimore Postoffice as Second-Class Matter* No. 8

CONTENTS

REMARKS ON THE DIAGNOSIS OF RENAL AND URETERAL CALCULI . . . . . H. A. FOWLER, M.D., F. A. C. S. . . 183

FOLDS AND WEBS AT THE UPPER END OF THE ESOPHAGUS. . . . . RICHARD H. JOHNSTON, M.D., F. A. C. S. 189

INDICANURIA—A STUDY OF 100 CONSECUTIVE CASES . . . . . J. RUSSELL VERBRYCKE, JR.. M.D. . . 191

SOLUBLE EXTRACT OF CORPUS LUTEUM. . . L. E. BEACH, M.D. 198

BOOK REVIEWS 200

EDITORIAL 203

Death of Prof. Thomas A. Ashby, M.D., LL.D.
The Editor of the MARYLAND MEDICAL JOURNAL.

MEDICAL ITEMS 208

Terms: $2.00 a Year | THE MEDICAL JOURNAL CO. Professional Building Baltimore, Md. | Index to Ads. Page ii

BOWEL TROUBLES

incident to Hot Weather or a change in living conditions can be promptly overcome by

Angier's Emulsion

The specially emulsified oil reaches every kink and fold in the bowel; it arrests fermentation and putrefaction, lubricates and cleanses the entire canal. Under the use of ANGIER'S EMULSION bacterial activity is arrested, local inflammation subsides and the movements become normal in character and frequency. You can secure the desired results by giving one or two tablespoonsful of ANGIER'S EMULSION in a glass of hot water three times a day.

Note the miscibility of the emulsified oil.

IF YOU ARE NOT FAMILIAR WITH THE EMULSION AND YOU HAVE A CASE WHERE YOU WOULD LIKE TO TRY SOME SAMPLES, WE WILL SEND THEM CHARGES PREPAID ON REQUEST

ANGIER CHEMICAL CO., BOSTON, MASS.

INDEX TO ADVERTISERS

When writing, say you saw advertisement in the MARYLAND MEDICAL JOURNAL.

Alkaloi Co.....vii
Angier Chemical Co.....i
Antiphlogistine (Denver Chem. Co.).xi
Baker, John C., Co.....vii
Battle & Co.....xv
Breitenbach, M. J., Co.....xv
Bristol-Myers Co xx
Brown Optical Co., The.....xxi
Carter, Dr. H. V.....xiii
Chalfonte Hotel.....xxii
Chambers, D. H.....xiii
Chevy Chase Sanatorium.....2d cover
City Dairy Co., The.....xvi
Cohen & Hughes, Inc.....xxv
Collins System.....xvi
Cook, Richard W.....xxi
Daniel, John B.....xii
Deetjen, Christian, Dr.....ii
Fairchild Bros. & Foster.....v
Fellows Medical Mfg. Co.....xviii
Fleet-McGinley Co.....viii
Galen Hall, Atlantic City.....4th cover
Giddings & Rogers.....vii
Gorsuch & Sons, G. H.....xxxi
Gundry Sanitarium.....xxx
Gundry Home, Richard.....xxx
Howard & Company.....xiii
Hub Auto Supply Co.....xxii
Huster & Winder.....xxii
Katharmon Chemical Co.....iii
Kofler, Siegfried.....xxxi
Lilly, Eli, & Co.....vi
Liverpool, Dr. J. H.....xxvii
Lozak.....xxxi
Medical Society Meetings.....iv
Mellin's Food Co.....xx
Morgan, T. C., & Co.....xxi
Mosby, C. V., Book Co.....xii
Ogden, A G., Co.....xvi
Parke, Davis & Co.....3d cover
Patapsco Manor Sanitarium.....xxxi
Peacock Chemical Co.....xii, xxi
Pearson Home.....xxx
Phillips, C. H., Chemical Co.....xvii
Phillips House.....xxii
Pollack's.....viii
Purdue Frederick Co.....2d cover
Reed & Carnrick.....xix
River Crest.....xxx
Robins, A. H.....viii
Sander, Carl, & Sons.....xxiv
Schlaffino, G., Co.....xiii
Sharp & Dohme.....xvii
Standard Oil Co.....xxiii
Shearer & Mossom.....xiii
Smith, Martin H., Co.....xvi, xxvii
St. Charles Hotel.....xix
Storm, Katharine L.....xxxii
Stuart's Pharmacy.....xx
Sultan Drug Co.....vi, xv
Thomas & Thompson Co.....xxi
University of Maryland.....xxxii
University of Md., Dental Dept.....ix
University of Md., Law Dept.....xiv
Van Horn & Sawtell, Front and 4th cover
Western Maryland Dairy.....xix
Willms, Chas., Surgical Inst. Co.....viii
Wilson, Dr. L.....xiii

LOCAL DIRECTORY

Blaylock, G. E.....xxvi
Bowen & King.....xxiv
Chattolanee Spring Water.....xxiv
Gossard Corset Shop, The.....xxiv
Hartzell, Miss T. O.....xxvi
Lee, Dr. W.....xxvi
Leimkuhler, M. H.....xxvi
National Bank of Baltimore.....xxiv
Roche, Geo. J., & Son.....xxiv

Electrotherapy
Hydrotherapy
Nauheim Bath

Telephone—Madison 5344
DR. CHRISTIAN DEETJEN
1702 Eutaw Place
Institute for Physical Therapeutics

Mechanotherapy
X-Rays and
Radium Laboratory

Doctor—
If You Want to BUY or SELL

ALOCATION or practice, if you desire an assistant, or to be an assistant, if you have any office equipment which you wish to sell or exchange, you can reach more physicians in the State of Maryland through the MARYLAND MEDICAL JOURNAL than in any other way. Rates, $1.00 per inch. Twenty-five cents extra if replies are sent through the Journal. Cash, in advance, must accompany copy.

ADDRESS ALL COMMUNICATIONS TO

MARYLAND MEDICAL JOURNAL
608 Professional Building BALTIMORE, MD.

DEFECTIVE NUTRITION IN SUMMER

is a more serious problem than in the winter because, as a rule, the gastro-intestinal function is impaired and response to reconstructives is less prompt.

In these conditions

CORD. EXT. OL. MORRHUAE COMP.
(HAGEE)

is ideally fitted to meet the need for a blood and tissue maker by reason of the ease of assimilation and the abundance of nourishment contained. It should be the agent of choice after long continued intestinal disorders.

PALATABLE
FREE FROM GREASE AND THE TASTE OF FISH.

Each fluid ounce of Hagee's cordial of the Extract of Cod Liver Oil Compound contains the extract obtainable from one-third fluid ounce of cod liver oil (the fatty portion being eliminated) 6 grains Calcium Hypophosphite, 3 grains Sodium Hypophosphite, with Glycerin and Aromatics.

Supplied in sixteen ounce bottles only. Dispensed by all druggists.
Katharmon Chemical Co., St. Louis, Mo.

KATHARMON
in irrigation, offers prompt relief in proctitis.

KATHARMON represents in combination Hydrastis Canadensis, Thymus Vulgaris, Mentha Arvensis, Phytolacca Decandra, 10½ grains Acid Borosalicylic, 24 grains Sodium Pyroborate to each fluid ounce of Pure Distilled Extract of Witch Hazel.

Katharmon Chemical Company. St. Louis, Mo.

WHEN you write advertisers, mention the MARYLAND MEDICAL JOURNAL.

Medical Society Meetings

MARYLAND

NOTE.—Secretaries are requested to advise us promptly of the election of new officers in their respective Societies, that due announcement may be made in the JOURNAL.

Except where otherwise stated, the Medical Societies of Baltimore meet at the Medical and Chirurgical Faculty building, 1211 Cathedral Street.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND. President, J. Whitridge Williams, M.D.; Secretary, Joseph I. France, M.D.

Baltimore City Medical Society

President, Chas. E. Sadtler, M.D.; Vice-President, F. H. Baetjer, M.D.; Secretary, Emil Novak, M.D.; Treasurer, W. S. Gardner, M.D.; Censors, C. E. Brack, M.D., O. B. Pancoast, M.D., R. Winslow, M.D.; Delegates, Gordon Wilson, M.D., C. F. Burnham, M.D., J. M. H. Rowland, M.D., John T. King, M.D., W. A. Fisher, Jr., M.D., R. Fayerweather, M.D., H. Friedenwald, M.D., J. H. Pleasants, M.D., S. McCleary, M.D., J. Staige Davis, M.D., W. E. Brinton, M.D.

SECTION OF CLINICAL MEDICINE AND SURGERY. 1st and 3d Fridays, 8.30 P. M.; October to May. Chairman, J. Staige Davis, M.D.; Secretary, E. B. Freeman, M.D.

SECTION OF DERMATOLOGY. 3d Wednesdays. Chairman, J. Wiliams Lord, M.D.; Secretary, I. R. Pels, M.D.

SECTION OF GYNECOLOGY AND OBSTETRICS. 2d Fridays in October, December, February and April. Chairman, J. M. H. Rowland, M.D.; Secretary, Emil Novak, M.D.

SECTION OF LARYNGOLOGY. 4th Fridays monthly, 8.30 o'clock. Chairman, Lee Cohen, M.D.; Secretary, G. W. Mitchell, M.D.

SECTION OF MEDICAL EXAMINERS. 3d Fridays in November and March. Chairman, J. D. Iglehart, M.D.; Secretary, W. E. Magruder, M.D.

SECTION OF NEUROLOGY. 2d Friday, monthly. Chairman, C. M. Byrnes, M.D.; Secretary, D. D. V. Stuart, M.D.

SECTION OF OPHTHALMOLOGY AND OTOLOGY. 3d Wednesdays. Chairman, J. W. Downey, Jr., M.D.; Secretary, L. B. Whitham, M.D.

County Societies

ALLEGANY COUNTY MEDICAL SOCIETY. President, J. T. Johnson, M.D., Cumberland; Secretary-Treasurer, M. J. Simmons, M.D., Cumberland, Md.; Delegate, A. Leo Franklin, M.D.

ANNE ARUNDEL COUNTY MEDICAL SOCIETY. President, T. H. Brayshaw, M.D., Glenburnie, Md.; Secretary, L. B. Henkel, Jr., M.D., Annapolis, Md.; Treasurer, F. H. Thompson, M.D., Annapolis, Md.; Delegate, C. R. Winterson, M.D.

BALTIMORE COUNTY MEDICAL SOCIETY. President, G. C. McCormick, M.D., Sparrows Point, Md.; Secretary, J. C. Monmonier, M.D., Catonsville, Md.; Treasurer, F. C. Eldred, M.D., Sparrows Point, Md.; Delegate, H. L. Naylor, M.D., Towson, Md.

CALVERT COUNTY MEDICAL SOCIETY. President, Compton Wilson, M.D., Friendship, Md.; Secretary-Treasurer, J. W. Leitch, M.D., Huntingtown, Md.; Delegate, P. Briscoe, M.D.

CAROLINE COUNTY MEDICAL SOCIETY. President, W. W. Goldsborough, M.D., Greensboro, Md.; Secretary-Treasurer, J. R. Downes, M.D., Preston, Md.; Delegate, H. W. B. Rowe, M.D., Hillsboro, Md.

CARROLL COUNTY MEDICAL SOCIETY. President, C. R. Foutz, M.D., Westminster, Md.; Secretary-Treasurer, H. M. Fitzhugh, M.D., Westminster, Md.; Delegate, M. D. Norris, M.D.

CECIL COUNTY MEDICAL SOCIETY. President, A. H. Cantwell, M.D., North East, Md.; Secretary-Treasurer, H. Bratton, M.D., Elkton, Md.; Delegate, G. H. Richards, M.D.

CHARLES COUNTY MEDICAL SOCIETY. President, John W. Mitchell, M.D., Pomonkey, Md.; Secretary-Treasurer, Thomas S. Owen, M.D., La Plata, Md.; Delegate, L. C. Carrico, M.D.

DORCHESTER COUNTY MEDICAL SOCIETY. President, Guy Steele, M.D., Cambridge, Md.; Secretary-Treasurer, W. H. Houston, M.D., Fishing Creek, Md.; Delegate, E. E. Wolff, M.D., Cambridge, Md.

FREDERICK COUNTY MEDICAL SOCIETY. President, M. A. Birely, M.D., Thurmont, Md.; Secretary, B. O. Thomas, M.D., Frederick, Md.; Treasurer, W. C. Johnson, M.D., Frederick, Md.; Delegate, J. C. Routson, M.D. January, April, August and November.

HARFORD COUNTY MEDICAL SOCIETY. President, A. F. Van Bibber, M.D., Belair, Md.; Secretary-Treasurer, Charles Bagley, M.D., Bagley, Md.; Delegate, W. S. Archer, M.D. 2d Wednesdays in January, March, May, July, September and November.

HOWARD COUNTY MEDICAL SOCIETY. President, W. C. Stone, M.D., Ellicott City, Md.; Secretary-Treasurer, W. L. Cissel, M.D., Highland, Md.; Delegate, W. R. White. Meetings quarterly first Tuesdays in January, April, July and October.

KENT COUNTY MEDICAL SOCIETY. President, H. G. Simpers, M.D., Chestertown, Md.; Secretary-Treasurer, F. B. Hines, M.D., Chestertown, Md.; Delegate, F. B. Hines, M.D.

MONTGOMERY COUNTY MEDICAL SOCIETY. President, F. N. Henderson, M.D., Rockville, Md.; Secretary-Treasurer, C. H. Mannar, M.D., Rockville, Md.; Delegate, W. L. Lewis, M.D. 3d Tuesdays in April and October.

PRINCE GEORGE'S COUNTY MEDICAL SOCIETY. President, H. B. McDonnell, M.D., College Park, Md.; Secretary, S. M. McMillan, M.D., Riverdale, Md.; Treasurer, W. Allen Griffith, M.D., Berwyn, Md.; Delegate, L. A. Griffith, M.D. 2d Saturday of every second month.

QUEEN ANNE'S COUNTY MEDICAL SOCIETY. President, C. P. Kemp, M.D., Stevensville, Md.; Secretary-Treasurer, H. F. McPherson, M.D., Centerville, Md.; Delegate, J. W. Stack, M.D.

SOMERSET COUNTY MEDICAL SOCIETY. President, R. R. Norris, M.D., Crisfield, Md.; Secretary-Treasurer, H. M. Lankford, M.D., Princess Anne, Md.; Delegate, C. W. Wainwright, M.D. 1st Tuesday in October, at Princess Anne.

TALBOT COUNTY MEDICAL SOCIETY. President, Samuel Trippe, M.D., Royal Oak, Md.; Secretary-Treasurer, A. McC. Stevens, M.D., Easton, Md.; Delegate, J. A. Stevens, M.D. Annual meeting 3d Tuesday in November and semi-annual meeting 3d Tuesday in May.

WASHINGTON COUNTY MEDICAL SOCIETY. President, W. B. Morrison, M.D., Hagerstown, Md.; Secretary, V. D. Miller, M.D., Hagerstown, Md.; Treasurer, W. B. Morrison, M.D., Hagerstown, Md.; Delegate, V. D. Miller, M.D. 2d Thursdays of February, May, September and November.

WICOMICO COUNTY MEDICAL SOCIETY. President, J. M. Elderdice, M.D., Mardela Springs; Secretary and Treasurer, H. S. Wailes, M.D., Salisbury, Md.; Delegate, G. W. Todd, M.D.

WORCESTER COUNTY MEDICAL SOCIETY. President, R. Lee Hall, M.D., Pocomoke City, Md.; Secretary and Treasurer, E. E. Wisehart, M.D., Snow Hill, Md.; Delegate, J. L. Riley, M.D., Snow Hill, Md.

Milk for the Infant
Prepared with

PEPTOGENIC POWDER—

by a simple definite formula and process, is remarkably like mother's milk in all particulars; in physical properties, color, taste, etc.; in percentage composition; as digestible as mother's milk; ***absolutely free from any digestive agent.***

This milk proves a complete and adequate substitute for mother's milk during the entire nursing period; and of very special service in partial breast feeding, a fact well established by experience, and peculiarly possible because of the close approximation of the "bottle" milk to the actual mother's milk.

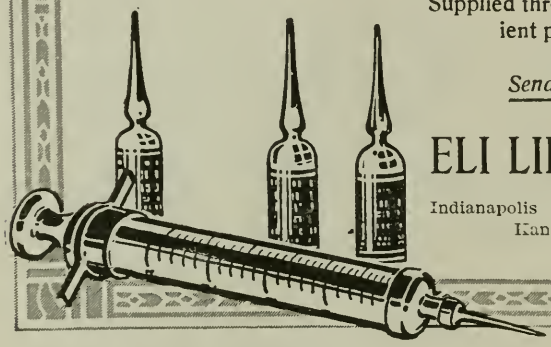
PEPTOGENIC POWDER, the original milk modifier, has been before the medical profession since 1882.

FAIRCHILD BROS. & FOSTER
New York

Lilly Ampoules

THE MOST COMPLETE AMERICAN LINE

Chemically pure, sterile solutions ready for hypodermatic use—rapidly growing in popularity with physicians.



Supplied through the Drug Trade in convenient packages and assortments

Send for descriptive pamphlet

ELI LILLY & COMPANY

Indianapolis New York Chicago St. Louis
Kansas City New Orleans

PRUNOIDS

For the Permanent Relief of
CONSTIPATION

CACTINA PILLETS
Regulate, support and strengthen the heart.

SENG
A trustworthy gastric tonic.

An ideal laxative free from the usual drawbacks of cathartics. Used with exceptional success in Intestinal Stasis, Obstipation, Auto-intoxication, or whenever a safe and pleasant evacuant is needed.

SULTAN DRUG CO.
St. Louis, Mo.

SUBSCRIBE TO THE
Maryland Medical Journal
$2.00 PER YEAR

No Cod Liver Oil Like BAKER'S

The reason is in the great care in the selection of **fresh perfect livers** and **special care** in **preparation.** It is a Norwegian Oil of highest purity obtainable, light in color, fresh and bland in taste, and extracted from the livers before decomposition has set in, imported in the colder months of the year in sealed cans and bottled as soon as opened to avoid the least rancidity. The Lofoton Oil is made only in midwinter, and has been proven superior to oils obtained from other parts of the world. Test its value by prescribing **BAKER'S OIL** in your first suitable case. The best names in the profession, such as Jackson, Mutter, Darragh, Leidy, Angew, Bartholow and others, have voluntarily endorsed our product.

JOHN C. BAKER CO.

Established 1830 PHILADELPHIA, PA.

In Order That Every Physician May Get Acquainted With Alkalol

and its high therapeutic value in the treatment of inflammation and irritation of mucous membrane, whether internal or external, we have arranged to mail a liberal sample for clinical test, upon receipt of request—a post card will do.

ALKALOL deserves the attention of every physician whose goal of treatment is results. A trial will justify its regular use—we make it easy for you to try it. Write today.

ALKALOL COMPANY

Taunton, - - - - Mass.

GIDDINGS & ROGERS CO.

210 Guilford Avenue

BALTIMORE, MD.

We Have the Facilities for Printing all Orders, from the Smallest to the Largest. We are Prompt. Our Prices are Reasonable

ESTIMATES CHEERFULLY GIVEN

Printers, Steel Die Engravers Lithographers Blank Book Makers

Pil. Cascara Comp.—Robins

Mild, 1 Grain Strong, 4 Grains

For INDIGESTION. DYSPEPSIA and CONSTIPATION

Samples and Literature on Request

RICHMOND **A. H. ROBINS COMPANY** VIRGINIA

J. EDWARD McGINLEY, President T. D. ROBERTS, Vice-President J. H. ROSENAU, Secy.-Treas.

Fleet-McGinley Company

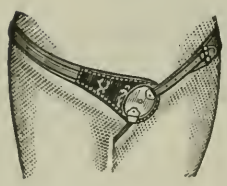
Printers

ESPECIALLY EQUIPPED FOR THE PRODUCTION OF GENERAL PRINTING AND HIGHEST GRADE OF COMMERCIAL WORK

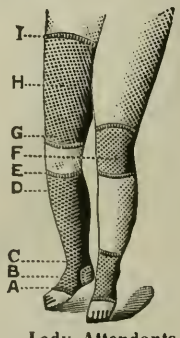
N. W. Cor. South and Water Sts. BALTIMORE, MD.

The Chas. Willms Surgical Instrument Co.

300 NORTH HOWARD STREET, BALTIMORE, MD.



TRUSSES
ABDOMINAL SUPPORTERS
ELASTIC HOSIERY
HOT WATER BOTTLES
FOUNTAIN SYRINGES



Discount to Physicians 25 Per Cent.

Lady Attendants

Hospital and Institution Beds and Bedding

We are Specialists IN THIS LINE

Furniture, Rugs
Bedding and Upholstery

POLLACK'S
ISAAC DAVIDSON, WM. B. FALLON, Props.

Howard and Saratoga Sts.
BALTIMORE, MD.
Estimates Solicited

WHEN you write advertisers, mention the MARYLAND MEDICAL JOURNAL.

University of Maryland
DENTAL DEPARTMENT

The regular Winter Session begins on October 1st of each year, and continues until the following May.

The Annual Catalogue contains Course of Study, Terms, etc. Attendance upon *three* regular Winter Sessions will be required before the final examinations for the degree of Doctor of Dental Surgery.

Graduates of Medicine and those who have attended one or more previous sessions at a reputable dental school admitted to higher grades. The requirements for admission are the same as in all other reputable dental colleges.

FEES

Matriculation (paid once only)	$ 5.00
Tuition Fee	150.00
Diploma Fee	30.00
Dissecting Fee (paid once only)	10.00

Students who have attended a Session of this, or any other College, prior to 1906-1907, are admitted on the old fees. For information and Annual Catalogue, Address

T. O. HEATWOLE, M.D., D.D.S., Dean
BALTIMORE, MD.

Medical and Chirurgical Faculty

OF MARYLAND.

OFFICERS AND COMMITTEES FOR 1916

President

J. Whitridge Williams.

Vice-Presidents

L. C. Carrico, M. D. Norris, J. A. Chatard.

Secretary

Joseph I. France.

Treasurer

W. S. Gardner.

Board of Trustees

L. McL. Tiffany, D. E. Stone,
W. Brinton, T. A. Ashby,
J. M. H. Rowland, J. W. Humrichouse,
W. J. Todd, J. W. Chambers,
H. M. Hurd.

State Board of Medical Examiners

Herbert Harlan, Harry L. Homer,
B. W. Goldsborough, Albert L. Wilkinson,
Henry M. Fitzhugh, Jr., John L. Riley,
Lewis A. Griffith, J. McP. Scott.

Councillors

Hiram Woods, Peregrine Wroth, Jr.,
L. F. Barker, Guy Steele,
G. Milton Linthicum, J. F. Crouch,
R. Lee Hall. Wilmer Brinton,
W. S. Archer. Randolph Winslow,
C. O'Donovan, H. B. Stone,
L. C. Carrico, H. L. Naylor,
W. J. Todd.

Delegates to American Medical Association

1915-1916.

Randolph Winslow, J. Hall Pleasants.

Alternates:

E. B Claybrook, J. S. Bowen.

Committee on Scientific Work and Arrangements

Wm. A. Fisher, J. M. H. Rowland, A. M. Shipley.

Committee on Midwifery

L. B. Whitham, F. V. Beitler,
M. Sherwood, P. F. Sappington,
J. McF. Bergland.

Library Committee

John Ruhräh, L. F. Barker,
C. B. Gamble, H. B. Jacobs,
R. B. Warfield.

Memoir Committee

J. T. Smith, C. F. Davidson,
C. Deetjen, M. G. Porter,
W. R. Eareckson.

Committee for Fund for Relief of Widows and Orphans of Deceased Members.

J. H. Robinson, Howard Bratton,
J. I. Pennington, Charlotte B. Gardner,
H. M. Lankford.

Committee on Public Instruction

Emil Novak, Lilian Welsh,
S. J. Fort, A. H. Carroll,
W. D. Wise.

Committee on Medical Education

Herbert Harlan, W. F. Lockwood,
R. Winslow.

Committee on Sanitary and Moral Prophylaxis

D. R. Hooker, O. E. Janney,
Lillian Welsh, A. T. Chambers,
E. H. Richardson.

Committee on Tuberculosis

J. Girdwood, W. L. Moss,
V. Cullen, M. F. Sloan,
G. W. Todd.

BOARD OF MEDICAL EXAMINERS

OF MARYLAND

Dr. Herbert Harlan, President, 516 Cathedral St., Baltimore.
Dr. B. W. Goldsborough, Cambridge.
Dr. Henry M. Fitzhugh, Jr., Westminster.
Dr. Lewis A. Griffith, Upper Marlboro.
Dr. Harry L. Homer, 714 Park Ave., Baltimore.
Dr. Albert L. Wilkinson, Raspeburg, Md.
Dr. John L. Riley, Snow Hill, Md.
Dr. J. McP. Scott, Secretary and Treasurer. Hagerstown.

REGULAR MEETINGS OF THE BOARD OF MEDICAL EXAMINERS OF MARYLAND.

Fourth Tuesday in April.
First Tuesday in June.
First Wednesday in October.
First Wednesday in December.

REGULAR EXAMINATIONS.

Examinations are held in Baltimore—

Third Tuesday in June for four consecutive days.

Second Tuesday in December for four consecutive days.

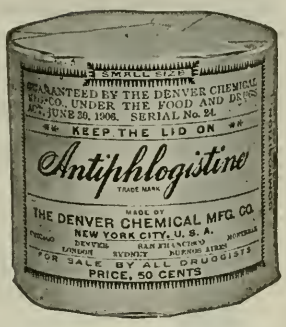
RECIPROCITY.

Maryland is in reciprocal relation with the following States: Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, Ohio, Oklahoma, South Carolina, Texas, Vermont, Virginia, West Virginia and Wisconsin, subject to requirements and fees imposed by the respective States.

Information connected with medical examinations and licensure by addressing Secretary J. McP. Scott, Hagerstown, Md.

REPRINTS.

Reprints will be furnished at a uniform schedule of price to all. The charges are for actual cost of paper and presswork. Prices and full information furnished with galley proof or upon request.


SMALL SIZE
GUARANTEED BY THE DENVER CHEMICAL MFG. CO. UNDER THE FOOD AND DRUGS ACT, JUNE 30, 1906. SERIAL No. 84
KEEP THE LID ON
Antiphlogistine
TRADE MARK
MADE BY THE DENVER CHEMICAL MFG. CO. NEW YORK CITY, U. S. A.
DENVER SAN FRANCISCO MONTREAL LONDON SYDNEY BUENOS AIRES
FOR SALE BY ALL DRUGGISTS
PRICE, 50 CENTS

Retarded, Impeded Circulation in an inflamed Part—Unless Quickly Relieved—Inevitably Leads on to Suppuration . . . . In Clinical Practice, Nothing Approaches

Antiphlogistine
TRADE MARK

Directions:—Always heat in the original container by placing in hot water.

Needless exposure to the air impairs its osmotic properties—on which its therapeutic action largely depends.

applied *hot and thick*—in its *unique power* to relieve, by osmosis and nerve stimulation, the congestion of inflammation; thus benignly assisting Nature in restoring *normal circulation*—the requisite for healthy cell-growth.

Uniformly and consistently the same reliable
"Antidote for Inflammation"—Summer and Winter

By ordering Antiphlogistine in full and original packages: Small, Medium, Large, or Hospital Size, "a perfect poultice" is assured.

Physicians should WRITE "Antiphlogistine" to AVOID "substitutes"

"There's only ONE Antiphlogistine"

MAIN OFFICE AND LABORATORIES

THE DENVER CHEMICAL MFG. CO., NEW YORK, U. S. A.

Branches: LONDON, SYDNEY, BERLIN, PARIS, BUENOS AIRES, BARCELONA, MONTREAL

SLEEPLESSNESS IN ACUTE INFECTIONS
particularly in children, is a
pointed indication for
PASADYNE
(DANIEL'S CONCENTRATED TINCTURE OF PASSIFLORA INCARNATA.)
We say this because PASADYNE (Daniel) is not only a reliable somnifacient and nerve sedative but also a thoroughly safe one.
•IT HAS NO CONCERN WITH THE HARRISON ACT•
(SAMPLES AND LITERATURE SUPPLIED TO PHYSICIANS PAYING EXPRESS CHARGES
LABORATORY OF JOHN B. DANIEL, INC., ATLANTA, GEORGIA.

CHIONIA
A true hepatic stimulant that does not produce catharsis
PEACOCK'S BROMIDES
The BEST because the PUREST for prolonged Bromide Treatment
Remarkably serviceable in the treatment of Biliousness, Jaundice, Intestinal Indigestion, and the many conditions caused by hepatic torpor.
PEACOCK CHEMICAL CO.,
St. Louis, Mo.

Practical Sanitation
A Handbook for Health Officers and Practitioners of Medicine
BY
FLETCHER GARDNER, M.D.,
Captain Medical Corps, Indiana National Guard; First Lieutenant Medical Reserve Corps, U. S. Army; Health Commissioner Monroe County, Indiana.
JAMES PERSONS SIMONDS, B.A., M.D.,
Professor of Preventive Medicine and Bacteriology Medical Department, University of Texas; lately Superintendent Indiana State Laboratory of Hygiene.
With an Introduction by J. N. HURTY, M.D., Health Commissioner of Indiana
400 Pages 40 Illustrations Price, $4.00
This volume aims to provide a safe way for the health officer to meet any emergency that may arise. Since sanitary officers in small places, out of the reach of libraries, are most in need of such a work, and since they are illy paid, the authors have endeavored to provide a book at a moderate price which covers public health and sanitation in a concise but practical manner.
THE C. V. MOSBY CO.—Medical Publishers—ST. LOUIS, U. S. A.

Hours, 9.30 to 3.30

DR. HEDLEY V. CARTER

St. Paul 8136

Osteopathist

326 N. Charles St. Brown Arcade Building 16 W. Saratoga St.

MEMBER STATE BOARD OSTEOPATHIC EXAMINERS

Our Surgical Department

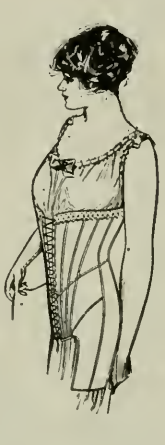
Is in charge of a Trained Nurse and Practical Corset Fitter. Our experience has shown us the need of an expert along these lines. We co-operate with the physician.

LaGrecque Corset

SHEARER & MOSSOM

103 W. Saratoga Street

Phone, St. Paul 5174 Near Rennert Hotel



Pure Italian Olive Oil

Wines and Liquors for Medicinal Use

The G. SCHIAFFINO CO.

220 N. Eutaw St. 702 S. Broadway

603 Forrest St.

Howard and Company

825 N. HOWARD STREET

BALTIMORE, MD.

MAKERS OF THE

KATHERINE CORSET

Surgical Bandages and Corsets by Prescription

D. HARRY CHAMBERS

Prescription Optician

312-314 N. Howard St. BALTIMORE, MD.

St. Paul 7918 Hours: 9 A. M. to 6 P. M.

DR. LORRAINE WILSON

Chiropodist and Electrolysis

Office: 906 Fidelity Bldg.

Expert Manicuring Cor. Charles and Lexington Sts.

Hon. HENRY D. HARLAN, LL.D.
Dean
1061 Calvert Building
Formerly Chief Judge, Supreme Bench, Baltimore City

EDWIN T. DICKERSON
Attorney-at-Law
Secretary and Treasurer
301 St. Paul Street

THE LAW SCHOOL

OF THE

UNIVERSITY OF MARYLAND

Lombard and Greene Streets BALTIMORE, MD.

A DAY SCHOOL and a NIGHT SCHOOL, with the same Faculty, requirements, course of instruction and fees in each.

*LECTURES { DAY SCHOOL, 4-7 P. M.
NIGHT SCHOOL, 6-9 P. M.*

FOR CATALOGUE AND FURTHER INFORMATION, APPLY TO

EDWIN T. DICKERSON
Secretary and Treasurer
301 St. Paul Street BALTIMORE, MD.

To
BUILD
UP
To
BRACE
UP
To
TONE
UP

Supplied in 11-ounce bottles only—never in bulk.

Samples and literature sent upon request.

Prescribe original bottle to avoid substitution.

In ANY form of DEVITALIZATION
prescribe

Pepto-Manĝan (Gude)

Especially useful in

ANEMIA of All Varieties:
CHLOROSIS: AMENORRHEA:
BRIGHT'S DISEASE: CHOREA:
TUBERCULOSIS: RICKETS:
RHEUMATISM: MALARIA:
MALNUTRITION: CONVALESCENCE:
As a GENERAL SYSTEMIC TONIC
After LA GRIPPE, TYPHOID, Etc.

DOSE: One tablespoonful after each meal.
Children in proportion.

M. J. BREITENBACH COMPANY
New York, U. S. A.

Our Bacteriological Wall Chart or our Differential Diagnosis Chart will be sent to any Physician upon request.

CACTINA PILLETS

A dependable cardiac tonic for
FUNCTIONAL DISORDERS OF THE HEART

PRUNOIDS
A physiologic laxative that does not gripe or cause after-constipation.
SENG
stimulates gastro-intestinal functions.

A remedy of proven efficiency for supporting, strengthening, and regulating the heart's action.

SULTAN DRUG CO., St. Louis, Mo.

BROMIDIA

(BATTLE)
NO BAD EFFECTS
BATTLE & COMPANY, CHEMISTS' CORPORATION.
SAINT LOUIS.

Secures Sleep most nearly resembling natural sleep. BROMIDIA (Battle) is made from the purest drugs, carefully compounded, and its formula is well calculated to secure the greatest effect with the employment of minimum dosage.

PROF. O. F. HUNZIKER
of Purdue University

is a contributor to our "Safe Milk" Magazine. So are Drs. Rosenau and Lerrigo and a number of other well-known medical men.

Just write or 'phone and we'll gladly put you on the mailing list. The authoritative articles are a decided help and a welcome education to all nursing mothers.

City Dairy

"Mt. Vernon 860" "Madison 2222"
"Homewood 193"

BALTIMORE, MARYLAND

HEALTH

Physiology in One Lesson

1. What is the biggest thing in life?
   Answer: Health.
2. Why is health the biggest thing in life?
   Answer: Because without it all other achievements are well-nigh impossible.
3. How is health to be obtained and retained?
   Answer: By supplying your body with good food and the proper kind and amount of exercise.
4. What kind of exercise should be indulged in?
   Answer. Systematic.
5. What is systematic exercise?
   Answer: That kind which one takes regularly as one does his meals and his sleep—that kind which fits one's peculiar needs and condition.
6. How is a busy business man to get systematic exercise without neglecting his other duties?
   Answer: By enrolling at the Collins System of Physical Culture, where resistant exercises of the systematic health-building kind are supplied by Director J. G. Payne and his healthy associates individually at any hour of the day from 9 A. M. until 7 P. M.
7. Can this system be investigated?
   Answer: Most certainly! It is vouched for by scores of the most prominent business men in Baltimore, and a trial treatment is gladly given. A postal will bring "The One Big Business," a most interesting booklet.
8. Where is the Collins System located?
   Answer: On the sixth floor of the Title Building, Courthouse Plaza. The phone number is St. Paul 6714.

(Author's Note.—Investigation by physicians solicited.)

ERGOAPIOL (Smith)

For
AMENORRHEA
DYSMENORRHEA
MENORRHAGIA
METRORRHAGIA
ETC.

ERGOAPIOL (Smith) is supplied only in packages containing twenty capsules.

DOSE: One to two capsules three or four times a day.

SAMPLES and LITERATURE SENT ON REQUEST.

MARTIN H. SMITH COMPANY, New York, N.Y.U.S.A.

MARYLAND
MEDICAL JOURNAL

A Journal of Medicine and Surgery

Vol. LIX, No. 8 BALTIMORE, AUGUST, 1916 Whole No. 1179

REMARKS ON THE DIAGNOSIS OF RENAL AND URETERAL CALCULI.*

H. A. Fowler, M. D. F. A. C. S.
Washington, D. C.

Of the Surgical conditions of the kidney and ureters which we are called upon to treat calculous diseases is the most common. It is unquestionably true that more stones are passed from the kidney and ureter than are removed by operation. But when for any reason a stone fails to pass, its removal by operation is demanded and the treatment, therefore, is purely surgical.

The surgical treatment of stone in the kidney at the present time differs from that of twenty, ten or even five years ago in one essential particular: Whereas all operations for the removal of stone, up to a few years ago, were of necessity exploratory operations, at the present time an exploratory operation is or should be, the exception. The exacting demands of present day renal surgery requires that a complete and accurate preoperative diagnosis must precede operative intervention in every case of suspected stone in the kidney or ureter. The positive demonstration of a stone in the kidney or ureter does not satisfy the requirements of a complete diagnosis. This is merely the first step. It is quite as important to determine the exact location of the stone in the kidney or ureter, as well as the number, size and probable composition. Furthermore, our preliminary study should determine the presence or absence of infection; to what extent, if any, the affected organ has been damaged by the calculous disease; and lastly, the condition of the opposite kidney.

The reason for this is obvious and is twofold; first, the ease and facility with which a stone is removed when its exact location in the kidney or ureter is known is in marked contrast to the difficulties often experienced in thoroughly exploring for an elusive stone which may be sought for in the lower pole or upper ureter

*Read before the joint meeting of the Baltimore-Washington Medical Societies, Friday, April 7, 1916.

and is finally trapped in the upper calyx of the kidney. There can be no doubt, I think, that the so called exploratory operation for stone in the kidney very often involves a considerable damage to the organ. And the more thorough the exploration the greater the traumatism produced. The wide incision through the parenchyma necessary for a thorough search and the rough handling incident to the digital exploration of the pelvis and calices must naturally cause considerable damage to the kidney. An accurate and complete pre-operative diagnosis should limit, therefore, the necessity for exploratory operation to exceptional cases only. And by simplifying the necessary operative technic the damage to the kidney is very materially reduced.

Second. In the second place the character of the operative procedure best suited to the requirements in any particular case must depend largely upon the data furnished by our preoperative study. One would scarcely ever consider a nephrectomy for example unless assured by previous examination of the integrity of the other kidney.

When, therefore, the presence of stone in the kidney has been demonstrated further study is necessary before the diagnosis, from the standpoint of operative treatment, can be considered complete.

The diagnosis of stone in the kidney or ureter is in general based upon the subjective symptoms presented together with the associated urinary changes, and is confirmed by an X-ray examination and instrumental examination of the patient when necessary. In a large percentage of cases the diagnosis is simple and easily made. The association of typical attacks of renal colis with hematuria and possibly pyuria suggests at once stone in the kidney. A shadow on the X-ray plate in the region of the kidney or along the course of the ureter confirms our suspicions and justifies the diagnosis of stone. That the diagnosis is not always so simple, however, is a matter of common knowledge and experience. The difficulties encountered can be appreciated best by a brief consideration of the various factors upon which the diagnosis is based. Subjective symptoms.

Pain is the cardinal symptom of stone in the kidney. We are very much in the habit of considering the pain caused by renal stone as either the typical attacks of renal colic or as a deep lumbar pain referred to the region of the affected kidney and radiating down along the course of the corresponding ureter. It is very interesting and perhaps startling to learn that an analysis of a large series of cases (251) shows that in only 46 per cent was the pain referred to the affected kidney alone and radiated down the ureter (Braasch). In another series of 153 cases of stone in the kidney and ureter at the Massachusetts General Hospital, studied by Cabot, pain in the right lower quadrant constituted the presenting symptom, the one for which the patient sought relief, in twelve cases. In thirteen the presenting symptom was abdominal pain entirely without colic; while in eleven backache was the

chief complaint. To quote Cabot "In all this group of 35 cases, the pain was never such as to suggest stone in the kidney and could readily have been mistaken for that associated with disease of the abdominal viscera. While my own personal experience does not cover so large a number of cases, yet in quite a considerable number which I have studied the findings as regards the character and irradiation of pain fully agrees with the analysis just referred to. As I have pointed out elsewhere, "it may be said that in no other organ of the body is pain so variable as to location, duration, intensity and irradiation." We may refer to the pain radiating to some other organ or region of the body, as atypical in contraindication to the typical renal colic or deep lumbar pains which we usually associate with kidney stone. Further, it seems to me convenient to divide the cases presenting atypical pain into the following groups: (1) Pain is absent during the entire course of the disease. (2) The pain is so slight as to attract little or no attention and may not be referred to the kidney area. (3) The pain is referred to some other organ or region of the body. In the latter case the kidney does not fall under suspicion and the nature and location of the trouble is apt to be overlooked. Not only that, but the symptoms are often so confusing and misleading as to lead us into the error of assuming that they arise from the lesions in other organs. This is particularly so when the pain is referred to the right lower quadrant. The unoffending appendix then becomes the target for surgical attack without any relief either to the patient or surgeon. We can all doubtless recall cases in which a similar error in diagnosis has been made. Some recent observations have led me to make the subdivision of cases mentioned. Several case histories might be given illustrating each group, but I will refer very briefly to only one of each.

C. F. B., aged 49, was referred on account of a swelling in the left side of the abdomen. An X-ray taken in Roanoke and another in Baltimore showed a large shadow opposite the third and fourth lumbar vertebrae. The diagnosis of stone in the kidney or ureter was made and this proved to be correct on closer study. At operation a calculus was found wedged down in the pelvis. The kidney was completely destroyed. Above and below the remnants of kidney tissue was found a tough thinned walled sac distended with fluid. The stone must have been present for years. But there was absolutely no history of pain referable to the kidney or any other organ at any time. It was for the relief of pressure symptoms produced by the swelling that caused the patient to seek medical aid.

D. M. L. An unusually vigorous athletic man of 50 sought relief of an inconstant drawing sensation in the muscles of the left back. This was noticeable at times in walking or deep breathing, but interfered very little with his athletic sports. There was never any acute pain. As he did not relish anything

interfering with his athletic habits, and particularly as he saw no reason for his disability, he sought the services of an orthopedic surgeon. Treatment along these lines gave no permanent relief.

An X-ray plate of the back revealed a stone shadow in the kidney area. Further examination confirmed the diagnosis of stone in the kidney. At operation a small stone about the size of a raspberry was removed with entire relief of symptoms. In this case the symptoms were very slight. And their character suggested trouble at the sacro-iliac joint.

Cases presenting atypical irradiation of pain undoubtedly are the most confusing, since the symptoms are so misleading. Cabot reports 26 abdominal operations in his series of 153 cases,—operations undertaken for the relief of conditions which did not exist, but which were thought to be producing the symptoms.

A most interesting group of cases belonging to this class with referred pain are those in which the pain is referred to the opposite kidney. The kidney containing the calculus is painless while typical attacks of renal colic occur on the opposite side. Mistakes in the diagnosis are not so apt to occur in this class of patients with our present methods of thorough preoperative study and examination. However, the mistake of operating upon the wrong but painful kidney has been made while the presence of a calculus in the other painless kidney was unsuspected. In his series Braasch found the pain referred chiefly to the opposite kidney in 6 per cent. I have reported elsewhere one such case where the pain was entirely and always on the contralateral side. The essential facts in this case are as follows. The history covered a period of 10 years during which time the patient had three typical attacks of renal colic. I saw this patient in her last attack when she was suffering with severe renal colic on the *right* side. She had never had at any time pain on the left side. We were very much surprised to find a stone in the *left* ureter. The right kidney and ureter were perfectly healthy so far as we could determine by a rather careful examination. All symptoms cleared up after the removal of the calculus. The occurrence of such relief pain serves to emphasize the importance of examining both kidneys and ureters in any cases of suspected stone even though the symptoms point to a lesion of one side only. The frequency of atypical pain associated with and produced by stone in the kidney (over 50 per cent of cases) renders this an unsafe guide in the diagnosis of this condition and is one of the most fruitful sources of error. (2) Urinary changes.

It would seem hardly necessary to call attention to the importance of a careful microscopic examination of the urine as a routine procedure. Yet neglect of this important detail has led to all sorts of errors in diagnosis and the performance of unnecessary operations. How frequently a normal appendix has been removed under the mistaken diagnosis of appendicitis when the real trouble was stone in the right kidney or ureter, it would be

difficult to say. But the number is certainly large. It is safe to assume that many cases of this kind would have been spared an unnecessary operation which brought no relief of symptoms if a careful microscopical examination of the urine had been made. In a recent case the patient had been prepared for an appendectomy but was spared at the last moment by the discovery of red blood cells in the urine. Subsequent examination revealed trouble in the right ureter. In another case the patient was less fortunate, he is minus his appendix to be sure, but he still has the same old pain which proceeds from a right sided pyelitis.

I have always been led to believe that a stone in the kidney or ureter is practically always associated with a varying amount of blood in the urine. Very often only a few blood cells are found. It is, therefore, rather startling to learn that in 150 cases of stone in the kidney and ureter in which the urine was carefully examined on more than one occasion it was found entirely normal in 21 cases of 14 per cent. (Cabot). In 15 cases of these the stone was in the ureter; in six it was in the kidney. It would seem, therefore, that a persistently normal urine occurs more frequently with stone in the ureter than in the kidney. Braasch found the urine normal in 12 per cent of his cases of ureter stone. On the other hand Geraghty writes, "While the finding of evident or microscopic blood is no proof of the presence of a ureteral calculus its repeated absence on examination is presumptive evidence of the absence of ureteral stone."

In my own experience I recall only one case in which the urine was persistently free from red cells. The stone was located in the upper calyx as shown by pyelography. It is quite probable that I have overlooked a stone in the kidney in some cases with the urine free from microscopical blood. That such cases occur and are not uncommon we are forced to admit from the evidence submitted by such careful observers. However, I must confess some hesitancy in accepting the percentage given which are so much at variance with my own experience.

X-RAY EXAMINATION.

Unquestionably the X-ray is the most important single method we have of making a positive diagnosis of stone in the kidney or ureter. The development and refinements in X-ray technic during the past few years has been very great. And as a result it is safe to assume that as applied to the diagnosis of stone in the kidney or ureter, the percentage of error has markedly diminished. There is and probably always will be a certain number of cases, however, where the X-ray will fail to clear up the diagnosis absolutely. The sources of error are two fold, (1) the failure to show a stone when one is present, and (2) difficulties in the interpretation of shadows in the kidney region and along the course of the ureter. While the statistics from various sources differ considerably as to the percentage of error, it is generally agreed, I believe, that this is greater with stone in the ureter. In other

words the X-ray is a less certain guide to diagnosis when the stone is in the ureter than when it is in the kidney. Braasch states that roentengenography alone will establish the diagnosis of ureteral stone in not more than 60 per cent. of cases. In his recent series the X-ray examination was negative in 11 per cent. In a smaller number of cases Geraghty found 22 per cent of failures. Cabot found 6 per cent. of failures in his series of 153 cases of renal and ureteral stone, but believe this showing is above the average which is about 15 per cent. On the other hand the X-ray plate will fail to show a stone in the kidney in from 3 to 6 per cent. of cases, according to Haenisch, Leonard, Keinbach, Hartung, Holland, Nogier, and Gost, while Immelmanns statistics (quoted by Rubaschow) shows an error in only 2 per cent. of cases.

There is a certain per cent of cases therefore, variously estimated by different observers, in which the X-ray examination is persistently negative. Now, what is to be said as to the positive findings. We are all aware of the great difficulty experienced at times in correctly interpreting shadows in the kidney area and particularly in the course of the ureter. Rubaschow enumerates no less than thirty-two conditions where a shadow is produced upon the X-ray plate which may lead to confusion. While this list is rather a formidable one, analysis shows that many of the conditions are extremely rare and that really there are only a relatively few which cause confusion.

In the interpretation of all X-ray plates of the urinary tract I want to emphasize the importance of the closest co-operation between the radiographer and clinician. The entire responsibility should not be placed upon the radiographer alone. Very often it will happen that the clinician is in possession of data which will materially help in the correct interpretation of these doubtful shadows. Moreover, the closest co-operation is absolutely necessary in clearing up the diagnosis in many cases, for example, where a shadow occurs in the course of the lower ureter. Here the combination of the X-ray ureteral catheter and stereoscopic plates are the only means of accurately differentiating between intra and extra ureteral shadows.

There is another very important aid in the diagnosis of stone in the ureter and kidney pelvis. When the X-ray plate is negative in a case of suspected stone the use of the wax tipped catheter is an extremely valuable and accurate method of detecting a stone when present. This method which was first introduced and employed by Kelly in the female using his open cystoscopic tube, has been recently extensively used in the male, following and ingenious technic of Burton Harris. As pointed out above, the X-ray plate fails most often where a small stone is lodged in the ureter. And it is in these cases that the wax-tipped catheter is most useful in supplementing the X-ray examination.

The foregoing brief summary emphasizes the difficulties some-

times encountered in the diagnosis of renal and ureteral calculi, and indicates the most common sources of error. While pain may be entirely absent or misleading as to location and confusing as to character; while the urine may be entirely normal and the X-ray examination persistently negative, yet, as has been pointed out, it is forunately rare indeed for all these conditions to be present at the same time in any given case.

And in closing I will repeat by way of emphasis, that the positive demonstration of the presence of a stone in the kidney or ureter constitutes only the first step in a complete preoperative diagnosis. Present day standards require in addition the employment of routine urologic methods of examination in order to furnish an adequate basis for sound surgical judgment.

FOLDS AND WEBS AT THE UPPER END OF THE ESOPHAGUS.

Richard H. Johnston, M. D., F. A. C. S.,
Baltimore, Md.

The routine use of the esophagoscope has disclosed some lesions in the esophagus peculiar from an anatomical and clinical standpoint. Not the least interesting of these is the occasional occurrence of webs and folds, a few of which have been reported. These formations are obscure from an etiological view; it is probable that some are congenital while others, causing difficulty in swallowing in adult life, may be due to the careless use of bougies and stomach tubes, to scratching and abrasion of the membrane from small bones or pieces of shell or from the swallowing of hot liquids. The fact that they practically always occur at or near the upper end of the esophagus where the tube is narrow tends to confirm the theory of slight trauma. In my esophageal work I have seen one fold or valve at the clavicle and a web at the upper end of the esophagus.

Some years ago a physician asked me to esophagoscope his maid, 21 years old, who, for some months, had had difficulty in swallowing. There was never complete obstruction to the passage of solid food but the patient located a "catch" as she expressed it in the clavicular region of the esophagus. Liquids were swallowed without difficulty. Examination of the esophagus was made under cocaine anesthesia with the patient sitting and the head somewhat extended. I passed my modified Jackson tube and pulled the larynx forward. The esophagus opened up and A French bougie number 37 passed into the stomach without diffi- there came into view at the level of the clavicle, a membrane or

fold attached to the left wall and involving more than one-half of the lumen of the esophagus. I introduced Jackson's large laryngeal speculum and passed Bunt's bougies through it into the esophagus with the result that the fold was easily torn through. A French bougie No. 37 passed into the stomach without difficulty and the patient immediately swallowed bread without trouble. She was advised to have the French bougie passed a few times to be sure that the esophagus would remain open. She made a good recovery.

The second patient was referred to me recently by Dr. E. L. Jones of East Newmarket with the history of having had trouble in swallowing for ten years. As a child she had been well and no history of a caustic could be obtained. She was 38 years old. At times she swallowed fairly well; sometimes the smallest particle of food would pass into the trachea and cause violent paroxysms of coughing. The obstruction grew worse gradually until the patient would take two hours in a vain attempt to swallow sufficient food to satisfy hunger. Often she would be forced to leave the table to get rid of food which refused to go down. Against my advice she insisted upon taking ether for the examination. With the head straight on the table the 10 mm. laryngoscope was passed. When the esophagus opened up a web of tissue was seen passing from the anterior to the posterior wall a little to the left of the middle dividing the upper end of the esophagus into two distinct openings. At the attachments the similarity to the web of a duck's foot was striking. Small bougies passed to either side of the web but if they happened to strike it obstruction was complete. The patient was allowed to come out of the anesthetic and when swallowing was re-established, a peculiar phenomeon was observed in that the muscular contraction seemed to cause the central part of the web to spread to the esophageal walls thus practically closing the lumen and making it impossible for anything to pass into the stomach. A large bougie—French—which could do no harm to the walls of the esophagus was passed and the web ruptured. When the soreness from the operation had passed off, the patient swallowed all food with ease. Two months later a French bougie number 37 passed easily into the stomach.

The treatment of webs and folds is satisfactory in that as soon as the obstruction is broken through, the patient swallows well and makes a prompt recovery.

A third case was that of a baby, 3 days old, at St. Joseph's Hospital who was starving through inability to swallow. The esophagoscope showed a membrane at the upper end of the esophagus. A hard rubber urethral catheter was carefully pushed through the obstruction with the result that the baby immediately began to swallow and gained rapidly in weight. As we have heard nothing from the child since it left the hospital, we infer that the membrane was permanently destroyed.

INDICANURIA—A STUDY OF 100 CONSECUTIVE CASES.*

By J. Russell Verbrycke, Jr., M.D.

Instructor in Gastro-Enterology at Medical Department of Georgetown University; Attending Gastro-Enterologist at Washington Asylum Hospital, Washington, D. C.

A MODERATE amount has been written on the subject of indicanuria but the literature is not very extensive, and since there exists quite a marked difference of opinion concerning the importance of the condition this study has undertaken

I venture to say that indican is not looked for more than one-tenth as frequently as albumin. Does the presence of indican reflect the existence of abnormal toxic conditions within the body? Some say "No, because it is so commonly found." This argument has little weight when we consider that not one in a hundred individuals are physically and functionally perfect. All are laboring under some handicap which tends to reduce efficiency. I hope to show later that the presence of indican is a very real indication of trouble.

The hundred cases here analyzed were taken consecutively, this number being chosen for purposes of easy averaging. After inspecting the results in the series I find that they tally very closely with the impressions I had received from the observation of several hundred others.

As is known, indican, or indoxyl potassium sulphate, is not poisonous, but is considered as an index as to the amount of various poisons found in the intestinal tract, for which we have no tests, while the test for indican is most simple. It is believed that formation of these toxins which have not been isolated takes place with the formation of the aromatics from bacterial decomposition of proteids, principally in the lower ileum, and that absorption takes place from the colon. Deductions as to some of the characteristics of these toxins will be considered later.

Of the one hundred cases forty-nine were in men and fifty in women—a very even balance between the sexes.

The digestive ailments which caused them to seek relief had existed for from one week to forty years, averaging about four years. It is manifestly impossible to say how long indicanuria had been a part of the clinical picture. The ailment had been fairly constant in forty-one, intermittent in fifty-four and periodic in five.

In some instances the indicanuria itself was markedly constant and in others it varied over considerable periods of time. Again it was merely transitory or accidental.

An endeavor was made to determine whether the putrefaction was primary or secondary and whether independent or sympto-

*Read at joint meeting of Baltimore City Medical Society and Medical Society of the District of Columbia, Baltimore, Md., April 7, 1916.

matic of the other digestive disturbances present. This it was not always easy to do. The symptoms and all the objective findings were studied in each patient and it was noted that apparently twenty-four were primary and sixty-nine secondary while in seven the exact status of the indicanuria could not be determined.

Certain organs concerned in the destruction of, or elimination of toxic materials from the body have been considered at fault when an excess of indican was present in the urine. The liver, the great detoxicating organ receives the portal blood before it enters the general circulation, and, theoretically, should break down all poisonous material, if not in great excess, unless functionally incapacitated. This sounds convincing but practically it has not been my experience to find indican more commonly in disease of the liver than in other digestive disorders. Again, I have frequently performed the urobilinogen test for liver functioning simultaneously with the indican test and while urobilinogen was occasionally found in small amounts it apparently was inconstant and the two tests did not parallel in intensity with any regularity.

The kidneys being the organs of elimination, we are interested in the relationship between kidney disease and autointoxication, not, uremic. We would expect, on theoretical grounds, in damaged kidneys to find the possible retention of some of the intestinal toxic products along with those of the general metabolism. Statements have been made by some observers that indicanuria is rare with acute and chronic kidney disease. My own observations have always led me to believe the opposite, namely that albumin and indican are very commonly found together, particularly in early stages of albuminuria.

In this series the urine was entirely free from albumin in but forty-five patients. Twenty-one had the faintest suspicion to the faintest possible trace of albumin; twenty-eight showed faint trace to marked trace, and six had a considerable amount. Therefore, 55 per cent. of the patients with indicanuria showed some albumin. In my laboratory I have a dark spot painted on the wall with electric light so arranged as to light a test tube of urine held against the black background in such a way as to demonstrate the least suspicion of albumin. In this way the faintest possible trace of albumin was demonstrated in twenty-one patients where in most laboratories it might have been missed.

But to show that this high percentage of albumin is not alone due to delicate technique it might be added that thirty-eight per cent. of these patients had hyalin casts and five per cent. granular casts in addition, only sixty-two per cent. being free from casts.

These instances of albumin and casts do not always mean nephritis however. I believe there are two classes of patients with co-existent albuminuria and indicanuria. In a certain and perhaps much the larger number of cases I believe the albumin to be due to renal irritation produced by the execretion of excessive amounts of irritating toxins. That the indicanuria was

first in these cases is evidenced by the fact that the albumin and hyalin casts often disappeared after the cure of the indicanuria. I also believe that if the irritation is long continued real nephritic changes may take place.

There are at least two factors influencing the appearance of excess of indican in the urine—one, the actual increased production of toxins in the bowel, and the other, increased absorption into the blood through damaged mucosa, etc. Slow passage or stasis of the intestinal contents under either of these circumstances will markedly increase the indicanuria, although not an essential. Neither does constipation, per se, tend to the production of indicanuria. These features are illustrated by the fact that typhoid fever and ulcerative lesions of the colon, as a rule, exhibit a high degree of indicanuria, regardless of the motor functioning. Conversely, there may be a marked uncomplicated constipation without indicanuria.

Twenty-nine of these patients had regular daily movements without medication, and some of the most marked instances of intoxication occurred in these patients. Fifty were constipated, six had loose bowels and in fifteen there was irregularity.

The acidity of the stomach contents was determined in eighty of the hundred. The average free hydrochloric acid was 40 and the total acidity 54, fairly normal figures. Acidity was normal in forty-one, high in twenty-seven and low in twelve. No definite relationship of acidity could be made out. Some cases of achylia with poor digestion showed marked indicanuria. On the other hand, some cases of gastric hyper-digestion exhibited just as marked grades.

Baar has stated that in ulcer of the stomach or duodenum, with hyperacidity, indicanuria is always present. Eighteen per cent. of this series had gastric ulcer and eight per cent. duodenal ulcer, a total of twenty-six per cent. The other side of the question, or the percentage of ulcers with indicanuria I have not been able to work out, but I should say offhand that probably between a third and a half of the ulcer patients have indicanuria.

Colitis or pericolitis were present in twenty-three per cent., visceroptosis twelve per cent., appendiceal dyspepsia nine per cent., cholecystitis five per cent., and cancer two per cent. These conditions may be regarded as usually being the primary factors in the syndrome of which the indicanuria was secondary.

It might be supposed that pyorrhoea would be one of the most frequent causes of intestinal putrefaction because of the enormous number of bacteria swallowed with the food. Twenty-five per cent. of the patients did have pyorrhea but this phase seemed relatively unimportant. The pyorrhea did undoubtedly contribute to cause many of the conditions to which the indicanuria was secondary but probably rarely influenced the latter directly.

A number of the series were radiographed. Ileosecal regurgitation was present in some. I think that I have seen but a single patient with incompetent ileo-cecal valve who did not have indi-

canuria and marked symptoms of intoxication. The function of the small and large bowel are entirely distinct and the valve was placed between them by nature for the distinct purpose of keeping them separated. I believe the perfect functioning of this valve to be of much more importance to the system than that of the pylorus. This constitutes the principal objection to the operation of ileo-sigmoidostomy but does not apply to ceco-sigmoidostomy which should be the operation of choice.

There is another etiologic factor, nerve strain, of the importance of which there can be little doubt. The action must be indirect through changing secretory and motor functioning of the digestive tract so that more undigested proteid residue is carried to the lower ileum to be decomposed by the waiting bacteria.

When we consider the symptom complex of the intoxication manifested by indicanuria we find the nervous system to bear the brunt. Some of the principal symptoms are headache, dizziness, nervousness, muscular weakness, easy fatigue, lack of energy, neuralgic or myalgic pains, sleeplessness or the opposite, paresthesias or eruptions of the skin, etc.

Is indicanuria of much importance? I consider that it is extremely so, both to the patient and to the physician, from the standpoint of present comfort and future health. Of these one hundred patients there were only four per cent. who had none of the indicanuria symptoms above enumerated. There were eleven per cent. who had but one symptom. All of the balance, eighty-five per cent. had from two symptoms to the typical syndrome. This surely seems significant.

The two most common symptoms are nervousnous and the triad of muscular weakness, fatigue and lack of energy. The former was found in seventy-eight per cent and the latter in sixty-eight per cent. The principal significance of these symptoms is the fact that they clear up simultaneously with disappearance of the indicanuria. Headache and dizziness were each present in sixty per cent. and occurred occasionally in three others. There is nothing characteristic about the headache. It may vary from a full feeling to migraine or neuralgia, and is more commonly frontal or temporal.

Seventeen per cent. complained of rheumatic pains, nineteen of numbness, tingling or other paresthesia, palpitation and sleeplessness each presented fifteen per cent. and phobias of various sorts were found in thirteen.

These indican symptoms were not always the principal ones complained of by the patient on coming for examination, but very often were. At times the treatment of the intoxication is the main consideration, and in other instances when some other condition present is cured the indican disappears spontaneously.

The indican and symptoms may be continuous or intermittent, persistent or transitory. I have had patients with indican continuously for weeks and months. These patients often acquire a decided tolerance to the toxins. The amount of poison present

at all times, if put into the blood of another not used to it would cause alarming symptoms. This characteristic of the poison is illustrated in another way. One of my patients had a marked indicanuria for a number of years. I had him under observation for months during all of which time indican was in great excess but symptoms moderate. Finally he lost the indican. He has on two occasions had slight return of the trouble but with symptoms more marked than with his former continuous excess. He has noticed this himself. I have made similar observations in other patients.

The intermittent cases are those usually with so-called bilious attacks, most of which I believe are due to acute indicanuria. No tolerance is present and the symptoms of toxemia are so marked as to bring about an acute attack with headache, vomiting, furred tongue, etc. Then again, there are the purely transitory cases which clear up under the least bit of treatment and do not tend to return.

Another characteristic of the toxins elaborated in the bowel seems to be their rapid action and rapid elimination from the body. This is not a fixed rule but there are many patients who are relieved of symptoms within a few minutes after a colon wash. There are many who can feel the toxemia within a short time after the indican appears in the urine. On the other hand, we do meet some cases, usually of long duration, in whom the symptoms and the indican do not tally so closely.

Considering some of the objective symptoms produced during indicanuria we find that the pulse rate is slightly quickened. It averaged eighty-one in my series. Haemoglobin tends to be lowered. It varied from forty-five per cent. to ninety-five per cent. and averaged seventy-eight and one-hundredth (78.1) per cent.

The effect on blood pressure is rather variable. There are so many factors entering into blood pressure changes that it is impossible to give figures in statistical form, especially since all ages were represented in this series. The systolic pressure varied from ninety mm. to two hundred and thirty mm. Seven per cent. were below one hundred mm., averaging ninety-four mm. with an average age of 33. Five per cent. were above one hundred and seventy mm., averaging one hundred and ninety-four mm., with average age of 61.

My general impression is that the immediate effect of the toxins is to lower blood pressure quite markedly but that long continued toxemia will induce changes resulting in increased tension.

It has also seemed to me that there are other diseases with the etiology of which intestinal putrefaction plays some part. For instance, in diabetes and pernicious anemia, a history of indicanuria symptoms existing for many months before may usually be obtained.

In my experience the degree of indicanuria has portrayed fairly accurately the amount of intestinal putrefaction. There are occasional patients whose clinical history is typical of indi-

canuria and yet examination of the urine fails to show an excess. Some of these are intermittent cases but some can not be explained.

We are unable to draw any conclusions as to the presence or absence of intestinal putrefaction from examination of the stool. Many specimens are putrefactive in character with considerable gas formation and odor of hydrogen sulphide but many are absolutely normal appearing and some even has the characteristics of fermentation with a sour or yeasty odor. The presence of fermentation is not incompatible with that of putrefaction.

Time forbids more than a mention of the treatment. I hope to take up experiences in treatment in a future paper. The principal considerations are first, to prevent as far as possible the formation of toxins and second, to wash them out by colon lavage. In general intestinal antiseptics and various Bulgarian bacilli preparations are of small value except in children. Calomel and other laxatives relieve some cases, but are calculated to render worse instead of better by hurrying down more undigested food for the putrefactive bacteria. I have known calomel to produce vertigo more marked than drunkenness. Proteids are limited but attempts to change the flora from putrefactive to fermentative are usually doomed to failure.

Some of the foregoing statements have been made somewhat dogmatically, but I will close by presenting a few histories to illustrate some of the points.

M. L., aged 40, had his first spell of dizziness and tingling of the extremities five years before. This attack had lasted three weeks. He felt fagged out about the middle of the day, had a peculiar uncertain feeling in the head and for the last 24 hours had been so dizzy that he could not raise his head from the pillow. His bowels moved regularly every day without medicine. Although a plethoric, full-blooded man, his blood pressure was but 115 mm. Physical examination was entirely negative. His urine showed faint albumen and an excess + 5 of indican (the highest possible amount according to the scale I use, in which + 1 represents sky blue and + 5 the other end of the scale blue black) and broad hyalin casts.

Under starvation and irrigations the indican fell to + 3 the following day and to normal the succeeding day, together with clearing up of the symptoms. Two days later on eating again indican rose to + 2, and although he had no return of dizziness, absence of energy was marked. He then improved greatly, but in a few weeks began to feel worse and indican rose steadily to + 5, resisting strenuous treatment for some weeks. It was finally controlled, and together with the absence of indican his capacity for work improved and toxic symptoms disappeared. Albumin and casts also were no longer found.

This patient had primary autointoxication. The history emphasizes some of the points I have brought out: (1) the close association between the symptoms and amount of indican, (2)

the presence of albumin and casts produced by irritation of the kidneys and their final disappearance, (3) the reduction of blood pressure and (4) the occurrence of marked toxemia with regular apparently normal movements.

E. A. F., aged 36, had marked indicanuria and typical signs of chronic parenchymatous nephritis for 16 years, resisting all treatment. His death was periodically foretold by leading clinicians of the country, but he is still alive, and for a year has been free from indican, although the albuminuria persists. His case is interesting in that he developed a high degree of tolerance as the toxema went on.

Mrs. R. S., aged 64, complained of nervousness and the most remarkable variety of neurasthenic symptoms all over the body. Examination was negative, except for a dilated cecum with some retention and some excess of indican with a trace of albumin. Treatment speedily relieved both indicanuri and symptoms. One year later symptoms returned in aggravated form, together with decided excess of indican. Treatment was unavailing in removing the indican or stopping symptoms until on my jokingly telling her one day that she had better discharge me and get a good doctor, she said, "Just as you say, doctor," promptly took my advice and discharged me, thereby giving me a new indican symptom—absence of sense of humor.

Mr. S. R., aged 26, complained of insomnia alone, and nothing was found but indican + 2, removal of which cured the insomnia.

The next patient is presented to show that indicanuria is a very real condition, ofttimes not tending to be cured by nature, but promptly curable by intervention with most gratifying results to physician and patient.

Mr. C. D., aged 29, had good health all his life. He used no tobacco or alcohol, and his bowels moved regularly. For a year he had had attacks coming first once a month, but later twice a week, of violent frontal headache, accompanied by vomiting. Indican which was present disappeared after two weeks' treatment, and he had no further attacks after starting treatment. He has remained well for over a year.

Mr. J. D. M., aged 38, complained of many symptoms referable to his nervous system. He had frequent attacks of the feet getting cold to the knees, followed by the collection of gas, pain in the breast and dizziness, so that he could hardly stand. Examination revealed chronic appendicitis with Jackson's membrane, ileocecal regurgitation and indicanuria. This was a case where the indicanuria was purely secondary, and yet the symptoms overshadowed the primary lesions. Operation was advised and refused. After a fight lasting for some months the indican was conquered, and although he still has the appendix and adhesions, the symptoms are gone, and he only has a slight attack once or twice a year.

Only one more case will be mentioned—that of a young girl

with a profound continuous indicurnia without apparent anatomic cause. For months the condition was uninfluenced by treatment. The patient had hay fever, and last fall prophylactic injections of mixed vaccine were given, with no effect on the hay fever, but at this time indican disappeared and there has been no return.

If I have been able to arouse your interest somewhat in this condition, and have been able to convert some of the doubters who say that they cannot believe that indicanuria is of much significance anyway, I shall feel that the time spent on the analysis of these histories has been worth while.

The Rochambeau.

SOLUBLE EXTRACT OF CORPUS LUTEUM.

By L. E. Beach, M.D.,
Baltimore, Md.

My attention was recently directed to a soluble extract of corpus luteum in 1 cc. ampoules for hypodermic administration. The contents of the ampoule was perfectly clear, indicating that the substance taken from the gland was in complete solution.

The hypodermic administration of corpus luteum seems to offer many advantages over the desiccated product, providing it is fully potent. From the limited experiences I have had with the soluble extract it fully meets all the requirements for treating conditions wherein corpus luteum is indicated. These cases usually present grave and alarming symptoms, and require concerted action on the part of patient and physician. By giving the treatment hypodermatically the average patient receives a favorable impression. The dose can be repeated on the second or third day, according to indications, and the attending physician can feel reasonably certain that he is going to get more definite results by giving the soluble product under the skin than by giving the gross desiccated gland substance in tablet or capsule. Early clinical observation bears out these conclusions.

I am convinced that this soluble extract corpus luteum possesses distinct therapeutic merits and is worthy of the earnest consideration of any physician who is called to treat cases where any preparation of this gland is indicated.

The following case reports may be of some assistance to those attempting to treat cases with this extract:

Case I.—Mary O.; age 19; female; schoolgirl.

History: First child of family of eight; patient began menstruation at age of 11, but was not regular, usually occurring every third week, accompanied by menorrhagia. Very nervous at time of menstruation, with marked mental symptoms. Thyroid enlarged, both lateral lobes very smooth and regular. Simple hypertrophy of the thyroid. This has existed for the past three years.

Treatment: Desiccated thyroid 5 gr. twice a day. Soluble

extract of corpus luteum subcutaneously every second day. Total amount of thyroid given, 100 tablets. Total amount of corpus luteum soluble extract, 12 injections. Has menstruated for the past four months regularly every 28 days, normal in amount and without pain. No nervousness before or during period. No enlarged thyroid gland.

Patient discharged and considered cured.

Case II.—Mrs. J. H. Y.; age 49; female; married; housewife.

History: Highly nervous type, menses irregular in amount and time, very painful, lasting from two to seven days; suffering from headaches and pain in neck, back, arms and lower extremities.

Diagnosis: Menopause.

Prognosis: Poor.

Treatment: 1 cc. corpus luteum soluble extract subcutaneously every third day for 30 days, inclusive. No improvement as to nervousness, menses, pains or headaches. Treatment discontinued. Treatment began on February 18; 1 cc. corpus luteum on the 22d and 26th and March 1. Patient still under treatment, and shows marked improvement.

Case III.—Mrs. L.; age 47; female; married; housewife.

History: Highly nervous type. Menses very irregular and painful; lasts for several days, varying in amount. Patient suffers from pain in neck and back and radiating pains down groins. General soreness and terrific headaches.

Diagnosis: Menopause.

Prognosis: Poor.

Treatment: 1 cc. corpus luteum soluble extract subcutaneously every third day until patient had taken 16 cc. in all. Patient relieved of headache and pain in back and groin. Menses normal in amount and regular, and has been for the past four months. Patient has gained 15 pounds in weight, appetite is good, rests well and appears to enjoy good health.

Discharged as cured.

Case IV.—Mrs. L.; age 21; female; married; housewife.

History: Has one child living, five years old. Had one miscarriage. No specific infections; has one sister in insane asylum.

Present Symptoms: Is very nervous; suffers a great deal from headache, neuralgia in neck and shoulders. Painful menstruation, lasts from five to eight days, very irregular, with marked mental derangement. Simple hypertrophy of thyroid gland.

Prognosis: Not very promising.

Treatment: Gave 1 cc. subcutaneously corpus luteum soluble extract every third day until 8 cc. were given.

Conclusions: Thyroid gland normal, mental condition cleared up, menses normal and regular, and patient does not suffer very much pain. Corpus luteum soluble extract was given credit for results in this case, as no other treatment was administered.

Case V.—Mrs. A.; age 23; married two years; housewife.

History: Chief complaint, sterility; weight 110 pounds; height 5 feet 10 inches; general health good. Menses began at age of

12, irregular in time and amount, very painful. In July, 1915, dilatation and currettement.

Treatment: Began December 1, corpus luteum soluble extract 1 cc. subcutaneously at three-day intervals until 10 injections were given. Menses were on time and suffered very little pain, normal in amount. Weight 117 pounds.

Treatment discontinued awaiting developments.

Case VI.—Mrs. H.; age 42; married; one child, 21 years old, by first husband; no pregnancies by second husband. Menses regular in both time and amount; has enlarged thyroid.

Diagnosis: Insufficient ovarial secretion.

Treatment: Started with 5 gr. thyroid tablets, five each day. As this seemed to induce a marked state of excitement, the dose was reduced to one tablet three times a day. In addition to this, the patient was given an injection of 1 cc. soluble extract corpus luteum at three-day intervals until 12 doses in all were given. During this treatment the nervous symptoms seemed to be worse, and both the tablets and injections were discontinued. Ten days after the last treatment symptoms of nervousness disappeared, and patient has since felt fine.

Book Reviews.

Laboratory Methods. By B. G. R. Williams, M.D., Member of Illinois State Medical Society, American Medical Association, etc., and E. G. C. Williams, M.D., Formerly Pathologist of Northern Michigan Hospital for the Insane, Travers City, Michigan. With an Introduction by Victor C. Vaughan, M.D., LL.D., Professor of Hygiene and Physiological Chemistry and Dean of the Department of Medicine and Surgery, University of Michigan, Ann Arbor, Mich. Third Edition. Illustrated with Forty-three Engravings. St. Louis: C. V. Mosby Company. Cloth, $2.50 net. 1915.

General practitioners are as a rule pressed for time, and either must forego laboratory tests or leave them to the pathologist or bacteriologist. In order to minimize the employment of the laboratory man, the Williamses have made a book containing those laboratory tests which can be made by any physician. They have incorporated in the text those methods which can be carried out with the simplest sort of apparatus. Surely there is a place in medical literature for a book of the character, else it would not have been necessary to prepare the third edition. As in the former edition, so in this one those methods have been selected which have proven trustworthy and reliable. If after extensive trial the method proves unreliable, it finds no place in this volume. So of the hundreds of new methods which have in recent years been heralded to the profession, only a choice few have found their way into this book, the authors believing, and justly so,

that it is wiser to retain the older tests than less trustworthy new. But even with this very commendable spirit, things change with time, and so here new procedures have been added to the laboratory armamentorium, some of which innovations come under the scope of a volume such as the above, namely, elastic tissue staining, salting-out method for tubercle bacilli, a simple gram stain, an invariable blood stain, etc. In order to disturb the text as little as possible, these have been incorporated in an appendix. It is an extremely useful little volume, which it gives us great pleasure to recommend to our readers contemplating the purchase of a simple work on laboratory technic.

Anatomy of the Brain and Spinal Cord. With Special Reference to Mechanism and Function. For Students and Practitioners. By Harris E. Santee, A.M., M.D., Ph.D., Professor of Nervous Anatomy in Chicago College of Medicine and Surgery, Medical Department of Valparaiso University; Professor of Anatomy in Jenner Medical College, Chicago; Member of Association of American Anatomists; Formerly Professor of Anatomy in the College of Physicians and Surgeons, Chicago, Medical Department of the University of Illinois, and Professor of Anatomy in Harvey Medical College, Chicago. Fifth Edition, Revised and Enlarged. With 158 Illustrations, 46 of Which Are Printed in Colors. 1915. P. Blakiston's Son and Company. Cloth, $4 net.

Doctor Santee handles his subject like the past master that he is. Starting with the gross anatomy of the part, he interweaves the histological and embryological factors in such wise as to really so simplify the subject that the student should have very little difficulty in gaining a thorough mastery over the anatomy of the brain. Very properly starting with the meninges of the brain and tracing their evolution, he passes on successively to the blood supply of the brain, general consideration of the brain, the cerebrum, the rhombencephalon, the spinal cord, tracing of impulses. The illustrations are excellent and add materially to the attractiveness of the volume. As a student's text-book and anatomical guide in the dissecting-room the book is without a peer and has but few equals.

International Clinics. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U. S. A. Volume IV. Twenty-fifth Series. Philadelphia and London: J. B. Lippincott Company. Cloth, $2 net. 1915.

The present volume marks the 100th appearance of International Clinics. Starting with the first volume, published in 1891, it has appeared regularly ever since, spreading and disseminating medical knowledge through the profession of the country. Its record has been so far honorable and the character of its articles most meritorious, and from the present able management of the

publication, the maintenance of its past high caliber is assured. We congratulate Dr. Cattell upon the completion of such a praiseworthy service, and sincerely hope the management of the periodical will be in his hands for many years more to come. With an eye always to service to the members of the profession located at a distance from the medical centers, the present issue is devoted to such topics as would seem most to meet their needs, namely, the cause and cure of pellagra, clinical laboratory methods in relation to the work of the general practitioner, the problem of the irregular heart, auto-intoxication, the value of the Roentgen examination for gall-stones, the Alvarenga prize essay, the surgery of the pancreas, etc. Surely a wide field of medical effort has been covered, and all of which are of direct concern to the general practitioner.

MARIE TARNOWSKA. By A. Vivanti Chartres. With an Introduction by Prof. L. M. Bossi of the University of Genoa. New York: The Century Company. Cloth, $1.50 net. 1915.

Miss Chartres has succeeded in giving us one of the most interesting biographies of a victim of circumstances written in recent years. Human nature is peculiar, and the sympathy one would naturally expect from the female sex toward an erring sister is wondrously lacking. As medicine becomes better and better developed, there is an awakening realization that many of the crimes of the weaker sex against the mandates of society are not perpetrated from a criminal instinct, but from a disordered body. These distempers manifest themselves in one way in one and in another way in the other. Marie Tarnowska is one of these unfortunates. Of a highly nervous and temperamental nature, with a taint of epilepsy in her family and sexually overdeveloped, she looked for protection and gratification from her husband, who, unfortunately, was a roue with not a particle of idea of the responsibilities of married life. Of an intensely amorous nature, what is more natural than the gratification of this craving, if not by her husband, then by a lover, and the step once taken, from one to the next as circumstances arose. Such was the impelling force in the soul of Marie Tarnowska. Nature was stronger than her will and idea of right. In the light of our present-day knowledge of psychiatry, the verdict would be sexual monomania, and the victim more pitied than censured. No novel is more alive with dramatic instances and climaxes. It seems impossible that so many unfortunate calamities could be doled out to a person. Surely there seemed to be a compelling fate guiding the destinies of Marie Tarnowska, who, as a penalty for her follies, was compelled to spend what should have been her happiest and brightest years in jail as an accomplice in the murder of her fiance. Every physician can read this book with profit.

MARYLAND MEDICAL JOURNAL

NATHAN WINSLOW, M.D., *Editor.*

Associate Editors:

THOMAS R. BROWN, M.D.
HUGH H. YOUNG, M.D.
RICHARD H. JOHNSTON, M.D.
JOSE L. HIRSH, M.D.
A. SAMUELS, M.D.

BALTIMORE, AUGUST, 1916

DEATH OF PROF. THOMAS A. ASHBY, M.D., LL.D.

On June 26, 1916, after a lingering illness, Dr. Thomas Almond Ashby, professor of diseases of women since 1897, succumbed to a complication of diseases. Within 16 months the medical school has lost six of its most distinguished and most useful members—Chew, Coale, Spruill, Streett, Chandlee and Ashby.

The death of Dr. Ashby removes from our circle another link binding us with the past, and one of the very few remaining bonds connecting the new with the old. He was born at Fort Royal, Va., on November 18, 1848, of distinguished ancestry. While he was still a lad the Civil War broke out, and though too young to take the field, he saw much of the horrow and desolation that overspread the Southland, and especially the almost constant military activities that occurred in the Valley of Virginia.

His experience during this period was given to the public in 1914 in an interesting volume entitled "The Valley Campaigns." During the same year he also published another book—"Life of Turner Ashby," being a biographical sketch of his distinguished kinsman, General Turner Ashby, C.S.A. In 1867 Dr. Ashby entered Washington College, Virginia, now Washington and Lee University, during the presidency of the idolized General Robert E. Lee. He remained here three years, taking an elective course in preparation for the study of medicine. It is evident that he made good use of his opportunities, as he acquired a varied fund of information which he continued to augment almost to the end

THOMAS A. ASHBY

of his life. While he was well versed in the classics, his especial delight was history, which he read with avidity and with a philosophic comprehension.

In October, 1871, he matriculated as a medical student in the University of Maryland, and, following the custom of those days, graduated two years later, in 1873. He was a clinical assistant or "House Student" in 1872, and also made excellent use of clinical facilities of the old Baltimore Infirmary, now known as the University Hospital.

After graduation he settled in Baltimore and began the practice of his profession, but in 1875 he accepted an appointment as resident physician to the infirmary, which he retained for more than three years. While occupying this position he established a reputation for exclusive ability and professional skill which were the foundation stones of a successful and distinguished career. In 1877 he established the MARYLAND MEDICAL JOURNAL, which is now completing its thirty-ninth volume. This journal has had a larger existence than any other medical periodical ever published in Maryland, and has been of great value to the physicians of the State.

In 1882 Dr. Ashby joined with several others in establishing "The Woman's Medical College of Baltimore," an institution for the exclusive training of women in medicine. He occupied the chair of obstetrics and clinical gynecology in this small but reputable school until 1897.

In 1889 he was called to the chair of diseases of women in the Baltimore Medical College, at that time a progressive and rapidly-growing institution. He here for the first time found a fertile field for the cultivation of his specialty of gynecology, and he soon acquired a wide reputation as a facile and skillful operator.

Upon the resignation of Prof. William T. Howard in 1897 Dr. Ashby was unanimously chosen as his successor as a professor of diseases of women in the University of Maryland, which position he continued to fill until his death. He entered upon his duties with great enthusiasm and earnestness, and with a con-

structive ability of a high order. His clinical work at the University Hospital attracted much attention, not only on account of the extraordinary celerity with which he performed difficult abdominal operations, but by reason of the unusual success that followed. Though stricken with a mortal illness, he continued to operate almost to the last.

He was the recipient of many honors. In 1890-1891 he was president of the Medical and Chirurgical Faculty of Maryland, this early recognition of his worth having been due to the fact that he had succeeded in securing 122 new members for the faculty. He had also been president of most of the local medical societies. He was elected a fellow of the American Gynecology Society in 1887, and at the time of his death was one of its oldest fellows. He was also a fellow of the American College of Surgeons, and one of its founders. In recognition of his high attainments his alma mater, Washington and Lee University, conferred the LL.D. degree on him a few years ago.

In 1912 he was elected a member of the House of Delegates of the Maryland Legislature, and he served so faithfully that he was not renominated. In addition to his vast literary labors as editor of the MARYLAND MEDICAL JOURNAL, and later of the *Hospital Bulletin* of the University of Maryland, he was a frequent contributor to the medical journals, and in 1903 he brought out a textbook on diseases of women. Unfortunately, almost the entire edition of this work was destroyed by fire in the great conflagration that occurred in Baltimore in February, 1904, and he never found time or inclination to reproduce the work.

His efforts in behalf of the University of Maryland were always constructive, and we trusted him to pull us out of many difficulties, and our trust was never misplaced. A noteworthy characteristic of Dr. Ashby was his unfailing optimism. If the cloud was dark, he could see the silver lining where the rest of us could only see an impending storm. Optimism is always an impelling force which incites the effort, while pessimism is a clog that stays the wheels of progress. His optimism was not a

passive virtue, but an active principle which enabled him not only to devise plans, but to put them into successful operation. No account of Dr. Ashby would be complete without reference to his courtesy, great kindliness, geniality, affability and friendliness.

He was a gentleman of the old school.

RANDOLPH WINSLOW.

THE EDITOR OF THE MARYLAND MEDICAL JOURNAL.

DR. NATHAN WINSLOW, the editor of this JOURNAL, is a member of the Medical Reserve Corps of the U. S. A., with the rank of first lieutenant. On July 1 he was assigned to active duty, and two days later was ordered to proceed to Fort Sam Houston, Texas, and report to the commanding officer. Arranging his private affairs as well as he could, Lieutenant Winslow obeyed the call of duty and reached Fort Sam Houston on the ninth of this month. He was there ordered to proceed to the Third Field Hospital, on the line of communication in Mexico, and we presume he has reached there before this time. We do not know exactly where this hospital is located, but think it is at Colonia Dublan, some distance below the border. In thus accepting active service, Lieutenant Winslow was perforce obliged to sacrifice his many interests, among which is the editorship of the MARYLAND MEDICAL JOURNAL. The JOURNAL, however, will appear as usual, and will be conducted by other members of the staff. We are conscious of our lack of experience in this work, and we ask the indulgence of our readers for our shortcomings. We hope that Dr. Winslow may have a useful and satisfactory service in the army; that he may escape rattlesnakes, tarantulas, scorpions, coyotes and Mexicans, as well as the diseases incident to the tropics and to camp life, and that, having served his country in its time of need, he may return to the peaceful avocations of civil life with an enlarged experience, a broader outlook and a still greater capacity for useful service to the community.

Medical Items.

Dr. Alan Churchill Woods, son of Dr. Hiram Woods of the University of Maryland, has gone to the "front" as a member of the Medical Reserve Corps, having left Philadelphia, where he has been living, for Fort Sam Houston, Texas, Thursday night.

Dr. Woods took his degree at Johns Hopkins in 1914, and then went to the Peter Bent Brigham Hospital, Boston, where he worked for a year and a half.

Dr. Charles Reifschneider, who was lately appointed assistant to Dr. Page Edmunds, is also assisting Dr. Frank Martin and Dr. Robert Bay at the University.

Dr. H. F. Stein is now acting superintendent of the University Hospital during the absence of Dr. W. J. Colemann, who is a captain in the Fourth Regiment, I. M. N. G., now stationed in Texas.

Dr. R. G. Willse of the gynecology outpatient department has been recently appointed a member of the gynecology installed at the Hebrew Hospital.

Dr. J. W. Pierson, 1905, now medical director of the health and accident department of the Fidelity and Deposit Co., has been appointed assistant of rontgenology at Johns Hopkins Hospital School.

Dr. P. P. Vinson of the University of Maryland has received an appointment in the Mayo clinic in Rochester and will go there on September 1. Dr. Vinson will work in the pathology and medicine.

The first examination of the National Board of Medical Examiners will begin on October 16, 1916, at the Army Medical Museum, Washington, D. C., and will cover a period of one week.

The Baltimore County Medical Association was entertained at Sparrows Point by Dr. Frank Coral Eldred and Dr. George Carville McCormick. A number of prominent physicians and surgeons were in attendance.

Among those present were Drs. William J. Todd, J. S. Bowen, F. H. Ruhl, T. L. Lang, A. C. Gillis, N. H. D. Cox, G. J. France, W. C. McClanahan, W. B. MacCracken, John B. Winslow, Randolph Winslow, S. R. Clarke, J. P. Wade, W. P. Wyse, D. J. Fort, John Harrison, Lewis H. Grundy, Henry William Lewis, S. R. Wantz, Frank Coral Eldred, G. Carville McCormick, William A. Boyd, A. McGlasson, A. W. Blorst, C. Hampton Jones, C. W. McElfresh, E. W. Brush, W. R. Dunton, B. F. Bussey, W. E. Vest, C. W. Vest, J. H. Drach.

Dr. Cooper Drewry is a member of Troop A and has been mustered into the United States service.

Dr. Edgar B. Friedenwald and Dr. Duncan McCalman of Baltimore have been ordered to Fort Sam Houston, Texas, for duty with the Medical Reserve Corps.

Dr. Robert W. Johnson, who is first lieutenant, Medical Corps, assigned Fourth Maryland Regiment, has left for Eagle Pass.

An official bulletin, just issued by the Rockefeller Foundation, is the first public statement of the principles and purposes of the School of Hygiene and Public Health, to be established as an integral part of Johns Hopkins University. The school will be opened in October, 1917, as it is estimated that a year will be required for the construction and equipment of the institute and the gathering together of the staff of teachers.

Prof. William H. Welch received the degree of doctor of laws at the spring convocation of the University of Chicago.

Dr. Edward L. Whitney, professor of physiologic chemistry, pharmacology and clinical pathology in the University of Maryland, has resigned to take up practice in Portland, Oregon.

Dr. George G. Snarr has been reappointed medical superintendent of the Franklin Square Hospital, Baltimore.

The regimental hospital corps of the Maryland National Guard is composed entirely of graduates of the University of Maryland, as follows: Major Robert P. Bay, S. Griffith Davis, Jr., J. Harry Ullrich, all of Baltimore, and Henry A. Mitchell, Elkton; Captain G. Milton Linthicum, Herbert Schoenrich, Frederick H. Vinup, William H. Daniels, William J. Coleman, Jacob C. Stansbury, Baltimore;

IN PLACE OF OTHER ALKALIES USE

Phillips' Milk of Magnesia

"THE PERFECT ANTACID"

For Correcting Hyperacid Conditions—Local or Systemic. Vehicle for Salicylates, Iodides, Balsams, Etc.

Of Advantage in Neutralizing the Acid of Cows' Milk for Infant and Invalid Feeding

Phillips' Phospho-Muriate of Quinine

COMPOUND

NON-ALCOHOLIC TONIC AND RECONSTRUCTIVE

With Marked Beneficial Action Upon the Nervous System. To be Relied Upon Where a Deficiency of the Phosphates is Evident

NEW YORK THE CHAS. H. PHILLIPS CHEMICAL CO. LONDON

YOUR hay-fever patients

May be as responsive as this one:

"Miss M. T., 21, had had hay-fever since childhood from May to frost. Gave calcium chlorid 1 gm. t. i. d., July 2d. July 28 greatly relieved. August 13, no hay-fever symptoms left; and had none during rest of the season." (See Dr. Wilson's report in *J. A. M. A.*, March 4, 1916, for further data.)

You are always sure of the purity of the calcium chloride when you use our "Elixir Chloro-Calcium"—five grains of the c. p. salt to the fldrm.; and it never disturbs the patient's stomach, as even the same salt is liable to do when it is administered in water.

Our process of manufacture of this Elixir eliminates the stomach-disturbing feature of calcium chloride.

We have some interesting literature on hay-fever which is yours for the asking.

SHARP & DOHME

"Quality Products"

BALTIMORE—MD.

Lieutenants Paul Hutton, Chas. W. Rauschenbach, George W. Rice, John S. Fenby, William R. Johnson, Caldwell Woodruff, Hyattsville, and Louis Diener.

Dr. Frederick N. Tanner, Baltimore, who was operated on at the Franklin Square Hospital recently, is reported to be convalescent.

L. Palmer Holmes, chief admitting physician to the Johns Hopkins Hospital, has left for a month's vacation in Arizona and San Antonio, Texas, where he will visit the U. S. A. headquarters.

The following resolutions were passed at a meeting of the Faculty of Physics of the University of Maryland, held on June 27, 1916:

The Faculty of Physics of the University of Maryland desires to place on record its great sorrow on the death of its late member, Prof. Thomas Almond Ashby, M.D., LL.D., as well as its appreciation of the many and varied attributes of mind and heart that were such prominent features in his character.

The services of Dr. Ashby to the University were always constructive and of great value. He abounded in optimism and had a firm faith in the destinies of the institution, and his death at this time entails a severe loss on the school.

It further desires to give expression to its appreciation of his loyalty as a friend, his courtesy as a gentleman and his unfailing kindness to everyone.

Graduating from the University of Maryland in 1873, he was elected professor of the diseases of women in 1897, after having occupied a similar chair in the Baltimore Medical College for nine years. In both of these responsible positions he measured up to a high degree of efficiency. Be it

Resolved, That these resolutions be spread on the minutes of the faculty, and that a copy of the same be sent to the family of Professor Ashby.

James H. Rowland, Dean.

At the session of the American Medical Association, the association for the study of the internal secretions was formed, the object of which is to collect, collate and evaluate the literature and work of this important phase of medicine.

The preliminary work of putting this new association on a sound and useful basis is in the hands of the following organizing committee: George H. Hoxie, Kansas City, Mo., chairman; L. F. Barker, Baltimore; Judson Daland, Philadelphia; John B. Potts, Omaha; L. R. DeBuys, New Orleans; Emil Goetsch, Baltimore, and Henry R. Harrower as secretary.

MARRIAGES.

Dr. David Corbin Street, a member of Johns Hopkins Hospital staff, to Miss Ferebe Guion Wescott, at Baltimore, July 19, 1916.

Dr. Walter C. Bacon, University of Maryland Medical School, to Miss Nellie Ellice Kinsey, at Govanstown, July 19, 1916.

Dr. Clarence C. Tolleson to Miss Livian Adkeson, at Spartanburg, S. C., on June 28, 1916.

DEATHS.

Thomas A. Ashby, University of Maryland, 1873, aged 68; a Fellow of the American Medical Association and president of the Medical and Chirurgical Faculty of Maryland in 1899; a Fellow of the American Gynecological Society and of the American College of Surgeons; professor of diseases of women in his Alma Mater; professor of obstetrics and clinical gynecologist to the Woman's Medical College, Baltimore; gynecologist to the Maryland General Hospital and consulting gynecologist to the Baltimore Home for Incurables, St. Agnes' Hospital and Mount Hope Asylum, Baltimore; a member of the House of Delegates of Maryland in 1910; who had conferred on him the degree of LL.D. by Washington and Lee University in 1912; author of several books dealing with the Civil War; widely known as a teacher and gynecologist, died at his home June 26.

William Simion, professor of chemistry, an expert in autochromative photography, died at his summer home at Eaglesmere Park, Pa., July 19, 1916, from complication of diseases from which he had been suffering for some time, aged 72.

John C. Knauer, M.D., Reading, Pa., P. and S. class of 1886, aged 51, a Fellow of the American Medical Association, died in the Homeopathic Hospital, Reading, June 3, 1916, from septicemia due to an operation wound.

FELLOWS' Compound Syrup of Hypophosphites

1866—1916

Not a new-born prodigy or an untried experiment, but a remedy whose usefulness has been fully demonstrated during half a century of clinical application.

For 50 Years The Standard

℞ Syr. Hypophos. Comp. FELLOWS'

Reject < Cheap and Inefficient Substitutes
Preparations "Just as Good"

THE FELLOWS MEDICAL MANFG. CO. LTD.
26 CHRISTOPHER ST.
NEW YORK

TONSILS.

By James M. Parrott, M.D., F.A.C.S., Kinston, N. C.

It is commonly accepted by general practitioners and frequently taught in textbooks that chronic tonsilitis is caused by gastro-intestinal disorders, frequent exposure to cold, damp feet, rheumatic diathesis, repeated attacks of acute tonsilitis, tubercular diathesis, etc. My experience has taught me that this etiological statement is in nearly, if not all, cases misleading. Instead of causing this disease, most often they are results. For example, a tonsil becomes infected with staphylococci, streptococci, etc.; toxins are absorbed from the focus, and either through the blood or otherwise produce gastro-intestinal disorders. After removal of the infected tonsilar area the gastro-intestinal symptoms disappear, and the patient is restored to health with no further treatment.

It is a very obnoxious and dangerous teaching to insist dogmatically that tubercular diathesis causes chronic tonsilitis and by not explaining in detail leave the impression that tubercular infection is never through the tonsil. In my opinion, a diseased tonsil is a portal very frequently through which tuberculosis gains entrance to the body. So thoroughly am I convinced of this that I feel justified, if for no other reason, in advising removal of either part or all of a diseased tonsil to prevent tubercular infection.

All small tonsils are not healthy. In fact, some of the worst tonsilar cases I ever saw were small, buried tonsils. All enlarged or prominent tonsils are not diseased. It is a fact that there is hyperplasia of nearly all lymphoid tissue in children of tubercular diathesis. No reason satisfactory to my mind has been offered for this. I surmise that it is a part of nature's campaign of defense, and if this is true, so long as such enlarged tonsils cause no disturbance by mechanical action, why should they be removed?

Gastro-intestinal diseases and the two diathesis already mentioned lower body resistance in one instance or a lowered body resistance accompanies the other, and hence one suffering from such disease or diathesis is more liable to tonsilar infection than a normal person. However, to state that they cause chronic tonsilitis is another case of "putting the cart before the horse."

My experience has led me to think that many practitioners regard the chief and most frequent damage done by diseased tonsils as almost, if not entirely, local. As a matter of fact, such is not the case. While the pharynx, larynx, etc., may be and often are affected by the extension of tonsilar disease, as evidenced by attacks of croup, dryness or "dripping" of throat, headaches, etc., the greatest harm done by infected tonsils (nearly all diseased tonsils are infected) is to organs at a distant part of the body.

The bacteriologist in our hospital has shown that chronic tonsilitis is nearly always caused by a mixed infection (streptococci, straphylococci and diplococci). Very frequently colon bacilli, and even typhoid bacilli, cause chronic tonsilitis, while tubercule play a frequent causative rôle.

Cervical adenitis is usually caused by infected tonsils, and generally disappears permanently after proper tonsilar operation. Headache, nervousness, and even stupidity, may be produced by

Visit Atlantic City

You will enjoy the invigorating breezes of the ocean at this time of the year. Stop with us at the St. Charles, where you will find everything conducive to a pleasant sojourn.

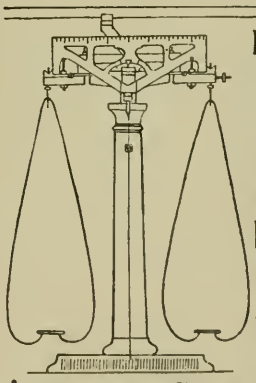
HOTEL ST. CHARLES

Directly on the Boardwalk. Orchestra of Soloists. Open All Year Around. Noted for Cuisine. Excellent Service. Automobiles Meet All Trains.

Western Maryland Dairy

BALTIMORE, MD.

BACTERIAL tests show that the milk received by us primarily contains a lower average percentage of bacteria than is usual. It is then subjected to pasteurization after the most scientific and modern methods, thus giving us a distinctive product. Our hygienic plant, **No. 1117 Linden Avenue,** is at all times open to the inspection of physicians and others who are interested.



IN CANCER, FEVERS and INFECTIOUS DISEASES the BALANCE may be obtained by the USE of the CELL PRODUCT

The BALANCE of HEALTH is DUE to CELL METABOLISM

PROTONUCLEIN

If INTERESTED

Send for Samples & Literature

REED & CARNRICK

42-46 Germania Ave. Jersey City, N.J.

diseased tonsils, and it is a very frequent observation that earaches and middle ear diseases have their cause in the tonsils.

Organs more distant than those in the head and neck are sometimes seriously and permanently impaired by infection or toxins from diseased tonsils. As an illustration of distal effect, let me cite a case. Lula A.—Nine years old; referred for operation by a physician who had correctly diagnosed the case as of tonsilar origin. For several years she had been subject to attacks of tonsilitis. For two years her general health had been bad. Examination revealed mitral regurgitation and low hemoglobin percentage. The tonsils were small, and on casual examination appeared normal. A very careful examination showed both badly diseased and deeply buried. After removal bacteriologic examination showed streptococci, staphylococci and diplococci in the raw, nasty tonsil crypts. The child rapidly improved, and while the heart murmur has continued and will be permanent, yet she is robust comparatively.

From these hop-skip-and-jump remarks please do not gather the idea that I think tonsils are "the root of all evil," or that their removal will cure all human maladies. Most assuredly I do not. I wish to make and emphasize the point that diseased tonsils cause a great deal of serious harm, both immediate and remote, and that such damage is often overlooked.

Let me say in conclusion that I do not advocate the partial removal of every tonsil or the complete enucleation of all tonsils. Many tonsils are being partially enucleated which should be completely removed and many completely enucleated which should be only partially removed. The throat specialist must realize that we are now in the era of physiological surgery, and that pathological surgery was the surgery of yesterday. To say that because a tonsil is diseased and therefore a tonsillectomy always should be done is to stand with the gynecologist of 20 years ago. In those days of "high" surgery ovaries were removed promiscuously, even on suspicion. We know better now, and even parts of ovaries, yes, more, we are grafting sections of ovarian tissue, thus recognizing the fact that ovaries have functions. So in tonsil work we must view the case from the standpoint of physiologists, and not entirely as pathologists. We must admit and so act in our work that nature is an expert and economical architect. We should remove the decayed sill when possible and not destroy the entire house because a small part is rotten.—*The Charlotte Medical Journal.*

TRUANTS BECAUSE OF THEIR PHYSICAL CONDITION?

Studies of the causes of truancy show that environment plays a very prominent part, and that family quarrels, squalid homes, gang life and overstrict teachers contribute each their share. Physicians, however, have felt that the physical condition of the truant might be an important factor, and that a correction of physical defects in school children would, perhaps, tend to reduce truancy. If accurate data were available for truancy in this city during the past 10 or 20 years, it would not be a difficult matter to observe the effect of the work of school medical inspection conducted by the Bureau of Child Hygiene. Unfortunately, comparative records of this kind are not available; we merely know

In Diarrhea of Infants

There are three important rules that should be rigidly observed—

Stop at once the giving of milk in any form.
Thoroughly clean out the intestinal tract.
Give nourishment composed of food elements capable of being absorbed with minimum digestive effort.

A diet that meets the condition is prepared as follows:

Mellin's Food - - - - - 4 level tablespoonfuls
Water (boiled, then cooled) - 16 ounces
(Composition — maltose, dextrins, proteins and alkaline salts)
(Calories per fluidounce = 6.2)

Feed small amounts at frequent intervals

As soon as the stools lessen in number and improve in character, gradually build up the diet by substituting one ounce of skimmed milk for one ounce of water until the amount of skimmed milk is equal to the quantity of milk usually given for the age of the infant. *Do not give any milk fat until the baby has completely recovered.*

MELLIN'S FOOD COMPANY, BOSTON, MASS.

PRESCRIPTIONS A SPECIALTY

Stuart's Pharmacy

Medical and Surgical Goods

1120 W. Fayette St. BALTIMORE, MD.

PHYSICIANS and NURSES SUPPLIED

SAL HEPATICA

AN EFFERVESCING
SALINE COMBINATION

LAXATIVE AND ELIMINANT

BRISTOL-MYERS CO.
NEW YORK

that last year among the nearly 800,000 pupils in the public schools there were 21,942 truants, less than 3 per cent.

In order to throw some light on the question here raised, the Bureau of Attendance of the Department of Education some time ago requested the Bureau of Child Hygiene of the Department of Health to undertake a physical examination of truants summoned before the District Superintendent for a hearing. Eighty-five such truants have thus far been examined, and while this number is entirely too small to furnish a basis for definite conclusions, a preliminary report on the results obtained may not be without interest.

In nine instances the family history appeared to have a definite bearing on the truancy, the father being alcoholic in five cases, insane in one, and tuberculous in one. In two cases the brother of the truant was epileptic.

In two instances the truant himself gave a history of convulsions.

In eight instances the examining physician reported "stigmata of degeneration present."

The blood pressure showed nothing abnormal, being below 100 in 14 instances, between 100-115 in 30 instances and over 115 in 38 instances. It was not tested in 3 instances.

There were 64 truants with some obstruction to nasal breathing. Many of these obstructions were of traumatic origin.

Eyesight was defective in 27 out of 77 truants, not being tested in 8.

The proportion of bony deformities was high, as witness the following found in 84 truants:

Bowed legs	2 cases
Lordosis	3 cases
Kyphosis	3 cases
Scoliosis	10 cases
Flat foot	6 cases
Rhachitic chest	2 cases
	26 cases

An irritable heart was reported in 7 cases, and endocarditis in 10. The heart was normal in 68 cases.

Pulmonary tuberculosis was encountered in only 1 individual.—*Weekly Bulletin of the Department of Health, City of New York.*

THE CAUSE OF TYPHUS FEVER.

Much progress has been made in recent years in solving the problem of the cause of typhus fever. Perhaps the most important demonstration from a practical point of view is the discovery by Nicolle, Ricketts and others that the disease is transmitted by the body louse. The demonstration also that apes, monkeys and guinea-pigs are susceptible to the typhus virus makes it possible to conduct systematic experiments on animals, and in the course of such experiments it has been shown quite conclusively that the disease is not caused by a filterable virus as we ordinarily understand it. And so the search for a bacterial cause has continued.

In 1914 Plotz described a gram-positive anerobic bacillus obtained in culture of the blood from patients with endemic typhus

SABALOL SPRAY FOR NASAL CATARRH

AFFORDS PROMPT RELIEF IN ALL CATARRHAL DISEASES REACHED BY LOCAL APPLICATION

Pharyngitis, Laryngitis, Hay Fever, Acute Coryza, Rhinitis, Ozena and Inflamed Mucous Membrane in All Parts of the Body

Laryngologists find SABALOL SPRAY invaluable in the treatment of the throats of actors, singers and speakers

IF UNACQUAINTED, SEND FOR SAMPLE

T. C. MORGAN & CO., 102 John St., New York

YOUR SPECIAL ATTENTION

IS DIRECTED TO

Beef, Iron and Wine, with Hydropepsin,

Liquid Pi-cine Co., Red Syr. Hypophosphites Co.,

Compound Salol Capsules.

THOMAS & THOMPSON CO.

Manufacturers and Dispensers of Pure Medicines (Wholesale and Retail)

Cor. Baltimore and Light Sts., Baltimore, Md.

WM. H. CARRIGAN, President E. F. OHLMEYER, Secretary and Treasurer

THE BROWN OPTICAL CO.

Optometrists and Opticians

112 North Howard Street BALTIMORE, MD.

Ex-President Cleveland said:

No investment on earth is so safe, so sure, so certain to enrich its owners as undeveloped realty. I always advise my friends to place their savings in realty near some growing town. There is no such savings bank anywhere.

Following this suggestion, I offer a few large lots, 125' x 250', in a new and growing Northwestern development just outside of Baltimore City at less than 4 cents per square foot. Mail a postal for maps, pictures and cash discounts. Also "Easy Terms".

RICHARD W. COOK, - - - 14 E. Lexington Street

The purity and quality of the salts used insure gratifying freedom from gastric disturbance or "bromism"-even on prolonged administration.

PEACOCK'S BROMIDES

Used with conspicuous success in Epilepsy, Uterine Congestion, Headache, the Reflex Neuroses and whenever a reliable antispasmodic or sedative is required.

CHIONIA

Affords hepatic stimulation without purgation---a true cholagogue.

PEACOCK CHEMICAL CO.

St. Louis, Mo.

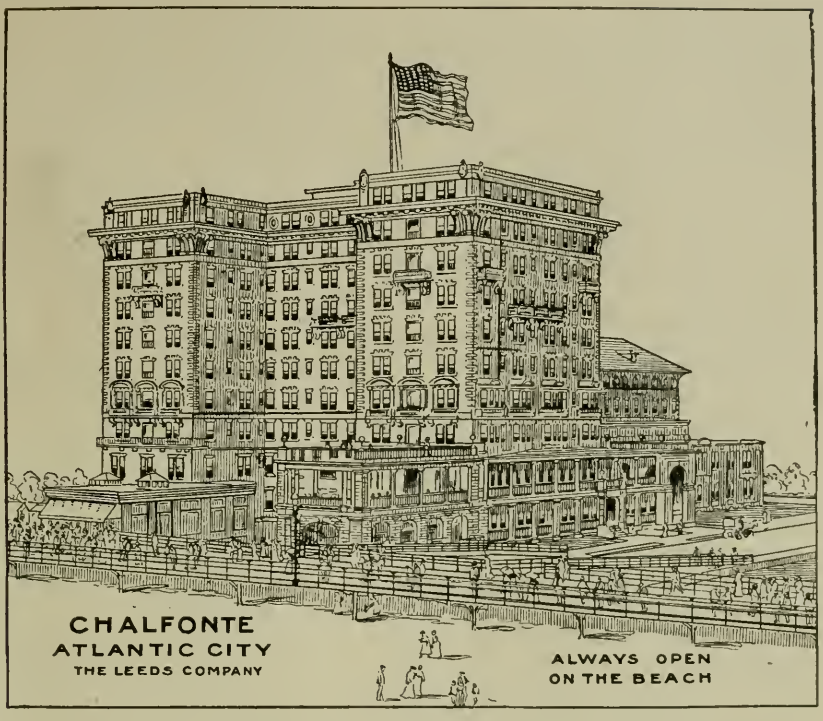
in New York and of typhus fever in immigrants in quarantine. The medium consisted of glucose agar and unheated, unfiltered ascitic fluid with a specific gravity of about 1.015. Subsequently the same bacillus was recovered from guinea-pigs and monkeys inoculated with typhus blood, and specific agglutination and complement fixation obtained with the blood typhus patients after the crisis. The evidence is consequently strongly in favor of at least some close relationship between this bacillus—the *Bacillus typhi-exanthematici*—and typhus fever; it can hardly be asserted, however, that it has been demonstrated conclusively to be the specific cause of typhus fever. It is not apparent that injections of this bacillus in animals give rise to the same reactions which occur after the injection of typhus blood; of course, it must be acknowledged that failure to produce reaction and failure to protect animals against the virus in typhus blood do not necessarily imply that the bacillus is not the cause of typhus, but they make the demonstration of the true relation of this bacillus to typhus fever difficult.

The extensive outbreaks of typhus in European countries involved in the war, especially Serbia, would seem to offer unexcelled opportunity for the further work necessary to settle the etiologic problem of this disease; in spite of the abundance of the material, however, the conditions in war do not seem to be favorable for scientific investigation. Thus we are informed that the American Red Cross Commission found it practically impossible to do systematic work during the last typhus epidemic in Serbia, and the recent work in Mexico by Olitsky and others was interrupted very soon after it had been started. From the latest Mexican work we see that the results again indicate the close relationship between the bacillus of Plotz and typhus, and we may hope that independent workers under favorable conditions will secure results before long of definite significance.

In connection with this work on typhus we note the melancholy fact that another investigator has died from the disease. Carlos E. Husk died March 20, 1915, from typhus fever contracted in the course of the work mentioned in the foregoing. There is probably no disease that has claimed so many victims among physicians and nurses as typhus. It is said that during 25 years, of 1230 physicians attached to institutions in Ireland, 550 died of typhus. Since the war, again, typhus has claimed many victims from physicians, among them, for instance, Jochmann, who was doing splendid work in the study of infectious diseases. And the martyr roll of typhus now includes three American investigators who have died from typhus contracted while voluntarily investigating the disease in Mexico—Conneff of the Ohio State University expedition, Ricketts, who accomplished so much, and now Husk.—*Journal of the American Medical Association.*

NONSPECIFICITY.

J. W. Jobling and William Petersen, Nashville, Tenn. (*Journal A. M. A.*, June 3, 1916), question the common belief as to specificity of disease and give the results of their studies in this regard after noting previous work pointing toward their conclusions. Among these they refer to the work of Schmidt and von Wagner, the former of whom called attention to the fact that, following vaccine therapy of any kind, the body becomes



Select Location

PHILLIPS HOUSE

Open All the Year

F. P. PHILLIPS

Specially Prepared Diets for Convalescents

Nurse and Doctor on Call

Massachusetts Ave., near Beach **ATLANTIC CITY, N. J.**

We are in a position to take care of your Auto Accessory wants at the right price and with the right service.

GIVE US A CHANCE
To Prove Our Claims

The Hub Auto Supply Co.

709 N. Howard Street

Telephone, Mt. Vernon 4547-M

Phones { Mt Vernon 3348-M WM. H. HUSTER
Mt. Vernon 2107 H. W. WINDER

"Always at Your Service"

HUSTER & WINDER

Garage and Service Station

Automobile Repairing, Autogenous Welding, Machinists' Accessories and Tire Repairs. Electric Starting, Lighting and Ignition Systems Storage Batteries Charged and Repaired.

1801 Lovegrove Alley

Bet. Charles and St. Paul Sts. BALTIMORE, MD.

resistant to a variety of the commoner affections. It is in the domain of coagulation disturbances that therapy of this nature has received particular attention in the past; in hemophilia, for example. Originally, the slight leukocytosis was regarded as the potent factor, but for this there is no warrant. Recently the dermatologists have had results from nonspecific treatment, and the therapy of typhoid fever has also been a chief avenue of approach to the problem. Latterly the hematopoietic organs have come to be recognized as the chief source of antibodies, and it would seem reasonable to suppose that various agents act as stimulants to the hematopoietic tissue which then floods the body with antibodies, overcoming the infection. The importance of the leukocytic reaction has been emphasized by some, but the authors do not recognize this. They say we must keep in mind that in typhoid fever it does not occur in the normal course of recovery. The hyperpyrexia, however, is to be considered, in their opinion. They have pointed out before that in experimental animals the intravenous injection of bacteria, kaolin, protein split products and trypsin is almost invariably followed by more or less marked mobilization of serum protease and usually of lipase, and a similar reaction occurs in patients, but not to the same degree or as regularly as in animals. A variety of reactions may occur from such a mobilization of ferments, and it may be there is a process of detoxication in that the toxic fragments are hydrolized to lower and to nontoxic forms. The influence of the fat-splitting ferments mobilized is as yet obscure. In conclusion, the authors say: "It seems probable that the fundamental change on which the majority of the above-described biologic reactions are based is one of colloidal dispersion, in that the injections bring about a less dispersed state affecting not only the serum proteins, but also the serum lipoids. Such an alteration is sufficient to account for the fluctuations in the ferment-antiferment balance, and in the coagulation mechanism, as well as in the opsonic and complement powers of the serum, although it does not at present explain the increased antibody titer. With this as a basis we can understand that so many and diverse substances can bring about a reaction almost identical clinically and therapeutically. But here, as in so many other biologic problems which have to do with that most complex of tissues, the blood, it seems probable that no single factor can be identified as responsible for all the changes which occur, but that a whole train of events is inaugurated when the equilibrium of some of the delicate serum balances is disturbed, all of which tend toward a condition favorable for recovery from infection."—*Journal of the American Medical Association.*

DO YOU KNOW THAT

Four per cent. of the inhabitants of certain sections of the South have malaria?

The United States Public Health Service has trapped 615,744 rodents in New Orleans in the past 18 months?

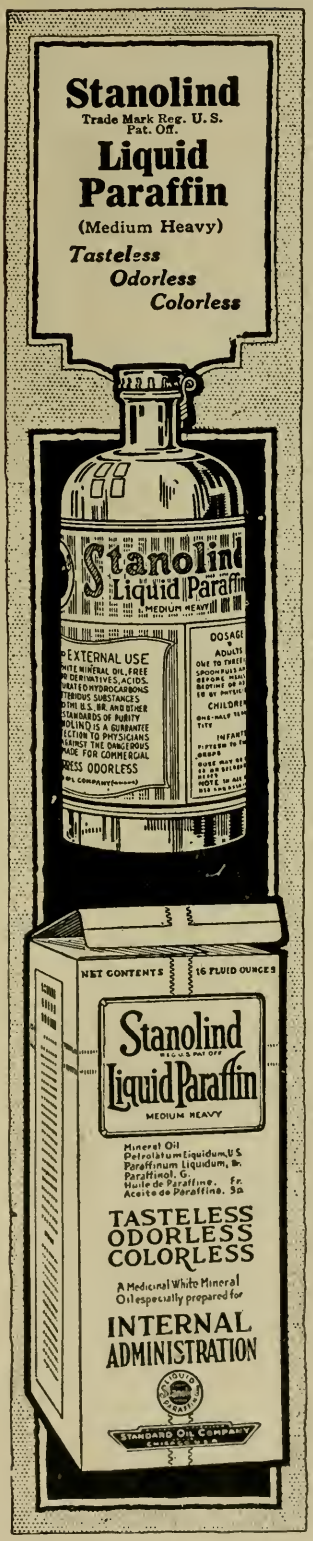
The careless sneezer is the great grip spreader?

Open air is the best spring tonic?

Typhoid fever is a disease peculiar to man?

Measles kills over 11,000 American children annually?

There has not been a single case of yellow fever in the United States since 1905?



Does Not Deplete the Patient's Strength

by irritating the delicate lining of the intestines and inducing undue peristaltic activity. On the contrary, it conserves strength by lubricating the entire alimentary canal, thus assisting in a more complete evacuation of the bowel content.

This important characteristic of Stanolind Liquid Paraffin is an eloquent illustration of its superiority over salines, aperient waters and purgative drugs, and is, for example, of signal importance in the cases of patients about to undergo an operation.

Stanolind Liquid Paraffin is a safe and dependable agent for continued internal administration.

A trial quantity with informative booklet will be sent on request.

Standard Oil Company
(Indiana) 30a
72 W. Adams St. Chicago, U. S. A.

LOCAL DIRECTORY

THIS Directory is maintained mainly for the benefit of local firms seeking the patronage of physicians and their families. Only well established and reliable concerns will be represented, and doubtless the space at our disposal will be constantly in demand. In responding to these exploitations, the reader will find it mutually advantageous to mention the MARYLAND MEDICAL JOURNAL.

THE MEDICAL JOURNAL CO.

GEO. J. ROCHE & SON
House, Fresco and Sign Painters
HOEN BUILDING
Phone, St. Paul 3152 Holliday and Lexington Sts.

We Do Not Prescribe Glasses—We Make Them
BOWEN & KING
Prescription Opticians
405 North Charles St.
Telephone BALTIMORE, MD.

The National Bank of Baltimore
BALTIMORE AND ST. PAUL STS.

Capital,	$1,210,700.00
Surplus and Undivided Profits,	323,572.91
Deposits,	7,676,460.75

The GOSSARD CORSET SHOP
422 North Charles Street, BALTIMORE
Opp. Hotel Rennert Mt. Vernon 4962-J
The Original Front Laced Corset, superior to other Front Laced Corsets. All the different models from $2 to $25. Fittings by expert fitter and corsetiere.

Chattolanee Spring Water

Publishers' Department.

Danger Due to Substitution.

HARDLY another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired luster to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme Court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

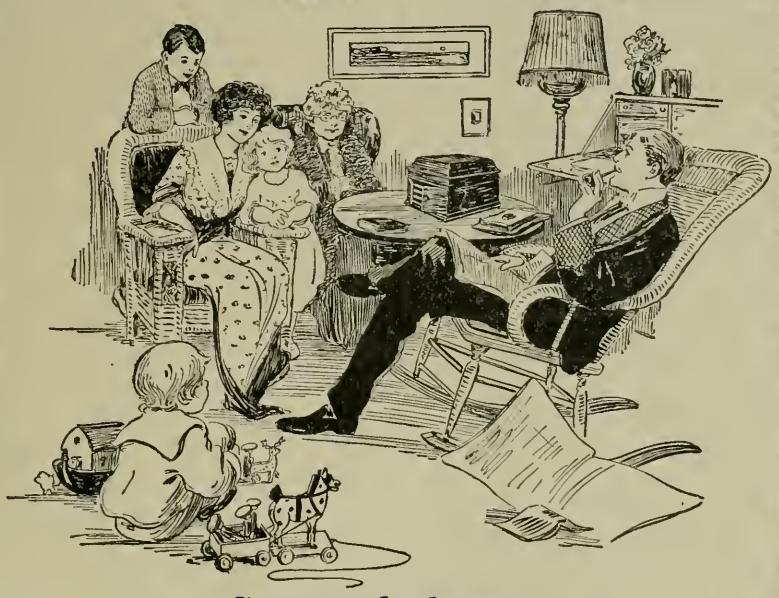
Renewed Confidence in the Bromide Treatment of Epilepsy.

IN the management of epilepsy the bromides still continue to be the remedy par excellence. In treating many of these unfortunate patients, however, the relief experienced is purchased at the expense of gastric distrubance, unsightly skin eruptions such as acne, and many other discomforts.

Unfortunately many practitioners have felt that the use of a single salt—potassium bromide usually—was preferable in the treatment of epilepsy. As a consequence of this and the all-too-frequent administration of an impure product, much harm has been done and the usefulness of the bromide treatment has been repeatedly questioned.

With the extension of knowledge on this important subject, however, a change has taken place and our most successful clinicians have at last wakened to the fact that satisfactory results can be accomplished by the bromides in the management of epilepsy if absolutely pure salts are used, in suitable combination and over a sufficiently long period. Continued study and investigation have substantiated these conclusions beyond all possible question.

Peacock's Bromides—each fluid drachm of which contains fifteen grains of the combined



Continual pleasure for the entire household

Pleasure is the big thing with all of us. We crave for amusement—we want to share in the music and fun that bring delight to others.

With a Victrola in your home you can enjoy the world's best music and entertainment whenever you are in the mood to hear it.

We'll gladly demonstrate the Victrola and play any music you wish to hear—stop in any time.

Victrolas $15 to $200. Victors $10 to $100. Terms to suit—at cash prices.

COHEN & HUGHES, Inc.

Victor Distributors

115 E. Baltimore Street **315 N. Howard Street**

LOCAL DIRECTORY

When YOU Want a DOCTOR

For your Tires, call **G. E. BLAYLOCK,** *The Boy with the RE-TIRE-ING Experience.* Ten years' practice has taught him how. Our work is best. Our price is less. **1811 N. Charles St.,** near North Ave. Send your Tires by Parcel Post. Phones—Mt. Vernon 701 and 702.

PHONE, WOLFE 4530-M

M. H. LEIMKUHLER

Orthopaedic Shoemaking

Special Shoes for All Deformities of the Feet
Repair Work Received by Parcel Post

1734 E. PRATT STREET

Phone, St. Paul 996 Manicuring

DR. W. LEE

Chiropodist

9 A. M. to 6 P. M. Sunday, 10 A. M. to 1 P. M.

121 W. Saratoga St. BALTIMORE, MD.

MISS T. O. HARTZELL

Masseuse

Electric Facial Massage. Scalp Treatment and General Massage. Outside Engagements by Appointment

2133 Madison Ave. BALTIMORE, MD.

pure and neutral bromides of potassium, sodium, ammonium, calcium and lithium—meet these requirements in every way and can be administered over long and protracted periods, not only with benefits of the most positive and gratifying character, but with surprising freedom from gastric irritation or "bromism." It can be said without question that Peacock's Bromides have given substantial aid in restoring faith and confidence in the bromide treatment of epilepsy by placing it on a practical and effective basis.

The Prophylactic Treatment of Hay Fever.

THE best way to treat disease is to prevent it. This is not a new thought. The expressive (if possibly inelegant) "prevention is better than cure" is as old as medicine. Unfortunately, prophylactic therapeutics has its limitations and, while the science of preventive medicine is undoubtedly expanding, these limitations are still rather sharply defined.

So far as the preventive treatment of hay fever is concerned, there is reason to believe that some real progress may now be recorded—an agreeable augury when one reflects upon the long and profitless search for a curative agent worthy to be called a specific.

Ragweed pollen extract, for example, gives promise of being an efficient immunizing agent in the autumnal type of hay fever. Its use is based upon the generally accepted theory that the ordinary hay fever of late summer and early fall, with occasional exceptions, is due to the pollen of ragweed, or to the toxic effects of other pollens closely analogous to ragweed in their protein content.

A reliable, accurately standardized ragweed pollen extract is supplied by Parke, Davis & Co. Each package contains three 5-mil (5-Cc.) vials, of 10 units, 100 units and 1000 units per mil (Cc.), respectively; one vial of physiologic salt solution for use as a diluent, and one scarifier. The extract is administered hypodermatically. Injections may be made with any small hypodermatic syringe, the so-called tuberculin syringe being well adapted to the purpose. Literature giving all necessary information as to application and dosage accompanies each package. The extract may be procured through any retail pharmacist.

While good results have attended the use of ragweed pollen extract after the disease has become established, the best effects are said to be obtained by early immunization. This prophylactic treatment should begin a month or six weeks before the expected manifestation of symptoms.

Auto-Toxic Ills and the Liver.

Auto-intoxication is so frequently due—directly or indirectly—to hepatic torpor, that stimulation of the liver becomes, perforce the first and most important detail of its treatment. The almost specific action of Chionia in increasing hepatic activity without producing catharsis gives it, therefore, a highly important place in the successful management of autotoric conditions. The results that follow its use are especially satisfactory in that they are accomplished through physiologic or natural channels. One to two teaspoonfuls in water, three times a day will rapidly restore biliary activity and thus remove the train of autotoxic symptoms commonly described as biliousness.

The Pallid School Girl.

In view of the modern methods of education, which force the scholar at top speed, it is not to be wondered at that the strenuous courses of study prescribed for the adolescent girl more than frequently result in a general breakdown of both health and spirits. Each winter the physician is consulted in such cases and almost finds the patient anemic, nervous and more or less devitalized. In most instances a rest of a week or two, together with an efficient tonic, enables the patient to take up her school work again with renewed energy. Pepto-Mangan (Gude) is just the hematinic needed, as it acts promptly to increase the red cells and hemoglobin, and to tone up the organism generally. It is particularly suitable for young girls, because it never induces or increases constipation.

The Hypersusceptibility of Children to Opium.

The hypersusceptibility of children to opium is one of the most potent reasons for employing a substitute in its place in the treatment of diseases of children. It has been found that PAPINE (Battle) is well borne by children to whom opium or morphine was intolerable, but when it is remembered that in the manufacture of PAPINE, through a special process, the narcotic and convulsive elements of opium have been eliminated, the reason for this point of PAPINE'S superiority over opium, will be well understood.

PAPINE (Battle), as is well known, is a product of opium subjected to a process which while retaining the analgesic and sedative properties of the drug, separates from it its objectionable qualities, leaving the finished product of more than ordinary worth as an opiate for use in children.

Codliver Oil In Hot Weather.

In Cord. Ext. Ol. Morrhuae Cord. (Hagee) the clinician who seeks the utmost from his therapeutic and dietetic aids, will find the ideal cod liver oil preparation for hot weather. Patients who rebel against the less palatable emulsions and complain of continued intolerableness, will take Cord. Ext. Ol. Morrhuæ Comp. (Hagee) over long periods without being subjected to the slightest disagreeable gastric symptoms. In securing this extraordinary degree of palatability for their product the manufacturers of Cord. Ext. Ol. Morrhuæ Comp. (Hagee) have not sacrificed the slightest therapeutic or nutritive effect of the oil, for their process of manufacture, whilst eliminating the grease, retains in the finished product the essential elements of the oil.

FEDERAL ANTI-NARCOTIC LAW
AND
GLYCO-HEROIN (SMITH)

The composition of Glyco-Heroin (Smith) is not being changed to meet any of the exemptions or privileges allowed under the so-called "Harrison Anti-Narcotic Law" and whereby it might be sold to the public.

Glyco-Heroin (Smith) will remain just what it always has been and just what it was always intended to be, viz: a stable, uniform and dependable product for the convenience and use of physicians only, in the treatment of Cough, Bronchitis, Whooping Cough, etc.

In prescribing Glyco-Heroin (Smith) use ordinary prescription blanks. Give the name and address of patient, your own name and address in full, your registry number and date when written, (no copy or other record required.)

Prescriptions cannot be refilled

MARTIN H. SMITH CO., New York

St. Paul 3034 Res. Phone, Madison 5395

DR. J. H. LIVERPOOL

Foot Specialist

101 North Eutaw St. Baltimore, Md.

Office Hours 9 A. M. to 6 P. M.—Sundays 9 A. M. to 2 P. M.

MELLIN'S FOOD.

To Physicians:—

Questions regarding Mellin's Food and its application to infant feeding are a source of education to all those interested in this subject; we are, therefore, ready at all times to give careful attention to inquiries relative to the Mellin's Food Method of Milk Modification, which is scientifically correct and easily understood.

MELLIN'S FOOD COMPANY,
Boston, Mass.

Nervous Irritability of Children.

During the summer season the physician often must have recourse to sedatives in the case of his little patients, who may be suffering from the ailments of the seasons. When this becomes necessary he will find PASADYNE (Daniel) to be a highly suitable agent for the purpose, for not only is it therapeutically active but also it is innocuous. It is this latter feature that gives PASADYNE (Daniel) a position superior to that of the other sedatives. PASADYNE (Daniel) is simply a distinctive name for a pure concentrated tincture of passiflora incarnata, made for a generation by one firm specializing in its manufacture. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

The Nutrition of Pulmonary Tissues.

During the winter and spring months the management of diseases of the bronchi and lungs is one of the most important functions of the physician. The treatment of acute infections must, of course, be largely symptomatic, but it is generally recognized that the best chance of securing results in chronic diseases of the bronchi and lungs is afforded by an agent that supplies nourishment to these tissues, and for such a purpose Cord. Ext. Ol. Morrhuas Comp. (Hagee) will give the utmost satisfaction. It contains the essential qualities of cod liver oil, but selected whenever cod liver oil is indicated.

The ampoule has attained a prominent position as an aid to medication, especially where subcutaneous, intramuscular and intravenous injections are required for immediate and prompt relief; the ampoule has also made it possible to administer with celerity accurate amounts of sterile solutions of definite strength and known therapeutic value.

It is all important that solutions for hypodermatic injections should be sterile; it is likewise evident that physicians are very frequently unable to prepare sterile solutions extemporaneously. To date no container has proven as practical as the ampoule.

Lilly Ampoules are encased in strong paper tubes, and may be conveniently carried in the pocket or medicine case. Each individual ampoule and each tube is fully labeled, making it unnecessary to keep the original container for identification.

The Lilly line of ampoule is said to meet the requirements of the most exacting clinician both in quality and range of items listed.

A Safe and Reliable Cardiac Tonic.

It is a matter of common observation in the treatment of functional cardiac disorders that all remedies must be avoided that tend to cause reactionary exhaustion or depression following their initial effect. To use a homely but more or less apt illusration, the driver of an unruly, high-strung horse should not pull it up suddenly or harshly, but always gently and firmly. Therefore, when the heart is irritable or unruly, as it were, it can best be regulated by a remedy that will accomplish this purpose in a gentle yet firm uniform manner. Clinical experience extending over many years has shown that Cactina is such a remedy and can be relied upon as a most satisfactory tonic in all functional cardiac derangements.

At any rate, the more one uses Cactina Pillets in the heart cases constantly being met in everyday practice, the more one grows to realize the value of this remedy. Prompt and positive in effect, Cactina has the great advantage of being perfectly safe and free from any tendency to cumulative action. It should, however, be constantly borne in mind that Cactina is not a powerful cardiac stimulant, but, on the contrary, is a tonic that acts by sustaining and steadying the heart.

Cactina has no contra-indications, and the experience of many thousands of competent physicians has conclusively shown that it can be used under any and all conditions with implicit confidence not only in its freedom from harmful or unpleasant effects, but equally in its capacity to support and strengthen the heart's action and thus help it to do its work.

Augmentation of Systemic Resistance to Infections.

Clinical experience seems to show quite clearly that certain infections may be reduced in severity by the administration of ECTHOL (Battle). Thus in erysipelas and furunculosis, to select two infections which have responded to the internal use of ECTHOL, it has been found that ECTHOL exerted an influence on the process of a most beneficial nature, which probably is best explained by assigning to ECTHOL the positive power of increasing the phagocytic action of the blood stream. Typhoid fever and smallpox are also diseases which indicate the employment of ECTHOL.

"I prescribed Tongaline for two cases of tonsilitis, after all other treatment had failed, with such success that both made a rapid recovery."

J. EDWARD McGINLEY
President

T. D. ROBERTS
Vice-President

J. H. ROSENAU
Secy.-Treas.

Fleet-McGinley Co.
Printers

OWING to an arrangement with the Medical Journal Company, all reprints of articles published in the Maryland Medical Journal must be ordered direct from the printers, FLEET-McGINLEY CO., at the following prices:

SCHEDULE OF PRICES
FOR
REPRINTS OF ARTICLES
APPEARING IN THE
MARYLAND MEDICAL JOURNAL

Four Pages

Copies.	Without Cover.	With Cover.
50	$2.95	$4.80
100	3.00	4.95
250	3.80	6.50
500	4.80	8.10
1000	6.30	12.85

Twelve Pages

Copies.	Without Cover.	With Cover.
50	$6.00	$7.85
100	6.15	8.25
250	7.80	10.50
500	10.25	13.30
1000	14.50	21.25

Eight Pages

Copies.	Without Cover.	With Cover.
50	$4.85	$6.75
100	5.00	6.90
250	6.10	8.75
500	8.10	12.10
1000	10.85	17.55

Sixteen Pages

Copies.	Without Cover.	With Cover.
50	$6.95	$8.75
100	7.15	9.10
250	8.85	11.50
500	11.90	15.90
1000	17.00	23.50

Due to the low price at which Reprints are printed, cash must always accompany order.

Especially Equipped for the Production of General Printing and Highest Grade of Commercial Work

N. W. Cor. South and Water Sts., Baltimore, Md.

SANITARIUMS, ETC.

The Gundry Sanitarium

(ATHOL)

A Private Sanitarium for the Care and Treatment of Nervous and Selected Cases of Mental Diseases in Women.

Splendidly located, retired and accessible to Baltimore, surrounded by 28 acres of beautiful grounds. Buildings modern and well arranged. Every facility for treatment and classification.

For further information, write or telephone

C. & P. 'Phone Catonsville 78-R

DR. ALFRED T. GUNDRY, or THE GUNDRY SANITARIUM
Athol, Catonsville, Md.

RIVER CREST SANITARIUM

Under State License

ASTORIA, L. I., NEW YORK CITY

For NERVOUS and MENTAL DISEASES, ALCOHOLIC and DRUG HABITUES

Home-like Private Retreat. Beautifully Located in a Large Park, Overlooking the City and Sound. Easily Accessible. Attractive. **Detached Buildings for Alcoholics and Drug Habitues.** Complete, *Modern* Equipment. Hydrotherapy, Electrotherapy, Massage, Amusements.

JOHN JOS. KINDRED, M.D., Consultant **WM. ELLIOTT DOLD, M.D.,** Physician in Charge

New York Office: **The Sydenham, 616 Madison Ave.,** Cor. 58th St.

'Phone, 1470 Plaza Hours: 3 to 4 and by Appointment Sanitarium 'Phone, 820 Astoria

REFER TO: Dr. Wm. F. Drewry, Superintendent Central State Hospital for Insane, Petersburg, Va., and others in the South.

The Richard Gundry Home (Established 1891)

HARLEM LODGE, CATONSVILLE, BALTIMORE COUNTY, MARYLAND

A WELL EQUIPPED SANITARIUM for the treatment of Nervous and Mental Diseases, selected cases of Alcoholic and Opium Habitues, and the various diseases requiring the removal from the environments of home.

For rates, etc., address **DR. RICHARD F. GUNDRY** C. & P. Phone No. 86, Catonsville

References

DR. WM. OSLER, Oxford, Eng.
DR. HENRY M. HURD, Baltimore.
DR. THOS. A. ASHBY, Baltimore.
DR. JULIUS FRIEDENWALD, Baltimore.
DR. NATHAN R. GORTER, Baltimore.
DR. SAMUEL C. CHEW, Baltimore.
DR. J. CLEMENT CLARK, Sykesville, Md.
DR. WM. S. THAYER, Baltimore.
DR. J. ALLISON HODGES, Richmond, Va.
DR. WM. F. DREWRY, Petersburg, Va.
DR. WM. S. GARDNER, Baltimore.

PEARSON HOME

a. Devoted exclusively to treating the various DRUG and ALCOHOLIC ADDICTIONS.

b. Our reduction system affords the morphine patient the greatest possible comfort and safety during treatment, and, we believe, the best prospects for permanent relief.

DR. C. B. PEARSON
Proprietor

Descriptive Literature Sent on Request
ADDRESS
4203 Groveland Avenue, ARLINGTON, MD.

Patapsco Manor Sanitarium ELLICOTT CITY MARYLAND

PATAPSCO MANOR SANITARIUM is a Private Home Devoted Exclusively to the Care of DRUG, ALCOHOLIC, NERVOUS and MILD MENTAL CASES

along the most modern and approved lines of professional and scientific treatment, each patient receiving direct personal care and attention of physician and nurses.

Located at Ellicott City, popularly known as the Switzerland of Maryland, on one of the highest points of Howard County, overlooking the magnificent Patapsco Valley.

Accessible by trolley or B. & O. R. R. from Baltimore.

The rates are reasonable as is consistent with careful, individual attention, and the superintendent will furnish such information as may be desired.

DR. W. RUSHMER WHITE
Superintendent

¶ When you write advertisers, mention the MARYLAND MEDICAL JOURNAL.

Binding and Lacing **ORTHOPEDIC SHOE SPECIALISTS** EXTENSION SHOES

PLASTER CASTS also Special Workmen on REPAIRING

Hand-made Shoes for Normal Feet

G. H. GORSUCH & SON

12 W. Twentieth Street BALTIMORE, MARYLAND

SIEGFRIED KOFLER, - *CATERER and CONFECTIONER*

FORMERLY CATERER AT THE BELVEDERE

EUTAW PLACE AND NORTH AVENUE

Weddings, Receptions and all kinds of Entertainments Solicited

"LOZAK" has been in the market for some years, and each month the demand has increased. Thousands of physicians are recommending it for stomach trouble. FOR SALE AT ALL DRUG STORES

University of Maryland School of Medicine and College of Physicians and Surgeons

Faculty of Physic

RANDOLPH WINSLOW, A.M., M.D., LL.D., Professor of Surgery.
L. E. NEALE, M.D., LL.D., Professor of Obstetrics.
CHAS. W. MITCHELL, A.M., M.D., Professor of Pediatrics and Clinical Medicine.
THOS. A. ASHBY, M.D., LL. D., Professor of Diseases of Women.
JOHN HOLMES SMITH, M.D., Professor of Anatomy.
JOHN C. HEMMETER, M.D., Ph.D., Sc.D., LL.D., Professor of Physiology and Clinical Medicine.
A. M. SHIPLEY, M.D., Professor of Materia Medica and Surgical Pathology.
S. K. MERRICK, M.D., Professor of Diseases of the Nose and Throat.
R. B. WARFIELD, M.D., Professor of Practice of Surgery.
GORDON WILSON, M.D., Professor of Principles of Medicine.
WILLIAM SIMON, Ph.D., M.D., Sc.D., Professor of Chemistry.
JOHN W. CHAMBERS, M.D., Sc.D., Professor of Surgery.
NATHANIEL G. KEIRLE, A.M., M.D., Sc.D., LL.D., Professor of Medical Jurisprudence.
WILLIAM F. LOCKWOOD, M.D., Professor of Medicine.
GEORGE W. DOBBIN, A.B., M.D., Professor of Obstetrics and Gynecology.
WILLIAM ROYAL STOKES, M.D., Sc.D., Professor of Pathology and Bacteriology.
HARRY FRIEDENWALD, A.B., M.D., Professor of Ophthalmology and Otology.
ARCHIBALD C. HARRISON, M.D., Professor of Surgery.
CARY B. GAMBLE, JR., A.M., M.D., Professor of Clinical Medicine.
WILLIAM S. GARDNER, M.D., Professor of Gynecology.
STANDISH McCLEARY, M.D., Professor of Pathology.
JULIUS FRIEDENWALD, A.M., M.D., Professor of Gastroenterology.
J. M. H. ROWLAND, M.D., Professor of Clinical Obstetrics.
ERNEST ZUEBLIN, M.D., Professor of Experimental and Clinical Medicine.
JOSE L. HIRSH, B.A., M.D., Professor of Clinical Pediatrics.
HIRAM WOODS, JR., M.A., M.D., Professor of Eye and Ear Diseases.
JOHN S. FULTON, A.B., M.D., Professor of State Medicine.
HARRY ADLER, B.A., M.D., Professor of Clinical Medicine.
THOMAS C. GILCHRIST, M.R.C.S., M.D., Professor of Dermatology.
FRANK MARTIN, B.S., M.D., Professor of Operative and Clinical Surgery.
CHARLES G. HILL, A.M., M.D., Professor of Psychiatry.
A. C. POLE, M.D., Professor of Descriptive Anatomy.
J. D. BLAKE, M.D., Professor of Clinical Surgery.
J. FRANK CROUCH, M.D., Professor of Clinical Ophthalmology and Otology.
CHARLES O'DONOVAN, A.M., M.D., LL.D., Professor of Clinical Pediatrics and Clinical Medicine.
G. MILTON LINTHICUM, A.M., M.D., Professor of Proctology.
W. B. PERRY, M.D., Professor of Clinical Gynecology.
TILGHMAN B. MARDEN, A.B., M.D., Professor of Histology and Embryology.
J. MASON HUNDLEY, M.D., Professor of Clinical Gynecology.
JOSEPH T. SMITH, M.D., Professor of Hygiene.
R. TUNSTALL TAYLOR, M.D., Professor of Orthopedic Surgery.
JOHN R. WINSLOW, B.A., M.D., Professor of Diseases of the Throat and Nose.
J. M. CRAIGHILL, M.D., Professor of Clinical Medicine.
JOS. E. GICHNER, M.D., Professor of Clinical Medicine and Physical Therapeutics.
CHAS. M. McELFRESH, M.D., Professor of Clinical Medicine.
IRVING J. SPEAR, M.D., Professor of Nervous Diseases.
JAMES A. NYDEGGER, M.A., M.D., ScD., Surgeon U. S. P. H. Service, Professor of Tropical Medicine.
GIDEON TIMBERLAKE, M.D., Professor of Genito Urinary Diseases.
EDWARD N. BRUSH, M.D., Professor of Psychiatry.
C. HAMPSON JONES, M.B., C.M. (Edinburgh), M.D., Professor of Hygiene and Public Health.
JOHN RUHRAH, M.D., Professor of Pediatrics.
CHARLES F. BLAKE, A.M., M.D., Professor of Proctology.
CHARLES E. SIMON, A.B., M.D., Professor of Clinical Pathology and Experimental Medicine.
FRANK DYER SANGER, M.D., Professor of Diseases of Throat and Nose.
BARTGIS McGLONE, A.B., Ph.D., Professor of Physiology.
G. CARROLL LOCKARD, M.D., Professor of Clinical Medicine and Director of Medical Clinic.
SAMUEL J. FORT, M.D., Professor of Materia Medica and Pharmacology.
JOHN G. JAY, M.D., Clinical Professor of Surgery.
NATHAN WINSLOW, A.M., M.D., Clinical Professor of Surgery.
PAGE EDMUNDS, M.D., Clinical Professor of Genito-Urinary Diseases.
WILLIAM TARUN, M.D., Clinical Professor of Ophthalmology and Otology.
CHARLES E. BRACK, Ph.G., M.D., Clinical Professor of Obstetrics.
HARVEY G. BECK, Ph.G., M.D., Clinical Professor of Medicine.
ALBERTUS COTTON, A.M., M.D., Clinical Professor of Orthopedic Surgery and Roentgenology.
ALEXIUS McGLANNAN, A.M., M.D., Clinical Professor of Surgery and Surgical Pathology.
ANDREW C. GILLIS, A.M., M.D., Clinical Professor of Neurology and Psychiatry.

For further information, apply to WM. F. LOCKWOOD, M.D., Dean of the Faculty, or CALEB WINSLOW, M.A., Registrar, University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md.

THE STORM BINDER AND ABDOMINAL SUPPORTER

PATENTED

Men, Women, Children and Babies

FOR HERNIA, RELAXED SACRO-ILIAC ARTICULATIONS, FLOATING KIDNEY, HIGH AND LOW OPERATIONS, PTOSIS, OBESITY, PREGNANCY, PERTUSSIS, ETC.

Send for new folder and testimonials of physicians. General mail order filled at Philadelphia only—within twenty-four hours

KATHERINE L. STORM, M.D.

1541 Diamond St. PHILADELPHIA

HAY FEVER PROPHYLAXIS.

Autumnal pollinosis (the ordinary hay fever of late summer and early fall) is held to be due to the pollen of ragweed, or to other pollens closely analogous to ragweed in their protein content.

An efficient immunizing agent in this type of hay fever is

RAGWEED POLLEN EXTRACT

The extract is administered hypodermatically.

We supply an accurately standardized product.

Ragweed Pollen Extract has given good results when administered after the onset of symptoms, but *the best effects are obtained by starting immunizing treatment a month or six weeks before the pollen season.*

For Fall Pollinosis—Immunize Now!

Each package of Ragweed Pollen Extract contains three 5-mil (5-Cc.) vials of 10 units, 100 units and 1000 units per mil (Cc.) respectively; one vial of physiological salt solution for use as a diluent, and one scarifier. When injecting, use any small syringe—preferably the so-called tuberculin syringe.

Full directions as to application and dosage accompany each package.

NOTE.—In packages corresponding to those of Ragweed Pollen Extract, we also market **Timothy Pollen Extract** for the treatment of spring pollinosis, and **Pollen Extract Combined (Timothy and Ragweed)** for treatment of individuals susceptible to both types of pollen.

LITERATURE SUPPLIED ON REQUEST.

Home Offices and Laboratories,
Detroit, Michigan.

Parke, Davis & Co.

"The Salt Breath of the Sea Brings Health"

GALEN HALL

And Cottages

Hotel and Sanatorium

ATLANTIC CITY, N. J.

¶ Stone, Brick and Steel Buildings, with every modern comfort. Two Elevators and five Sun Parlors.

¶ Convalescents can have specially prepared diets and other helps, and be under control and advice of home physician through our resident.

¶ Our Treatment Department includes Electric and Hydriatic Appliances of the latest style, with Sea Water. Trained attendants only.

F. L. YOUNG, General Manager

So many cases of

Pruritus, Chafings, and Irritations

are relieved by applying

K-Y Lubricating Jelly

that we feel we owe it to our patrons to direct their attention to the usefulness of this product as a local application, *as well as* for surgical lubrication.

No claim is made that K-Y Lubricating Jelly will act with equal efficiency in every case; but you will secure such excellent results in the majority of instances that we believe you will continue its use as a matter of course.

NO GREASE TO SOIL THE CLOTHING!

Collapsible tubes, 25c. Samples on request.

VAN HORN AND SAWTELL
15-17 East 40th Street, New York City

"For this relief much thanks,"

said Hamlet.

So also says the patient who has just used the

K-Y ANALGESIC

you told him to get from his druggist

FOR THE LITTLE ACHES OF EVERY-DAY LIFE,—

little aches where a hypodermic would be too much, and where the pain is also too much for the patient. In such conditions,

K-Y ANALGESIC

is an agreeably efficient middle course. No grease to soil the linen. Washes off in water.

Collapsible tubes, 50c., druggists. Booklet and sample on request

VAN HORN AND SAWTELL
15-17 East 40th Street, New York City

FLEET-MCGINLEY CO., PRINTERS,
BALTIMORE, MD.